Gulstonian Lectures
ON
THE LYMPHATIC SYSTEM AND ITS DISEASES.

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BY JOHN CURNOW, M.D., F.R.C.P.,
PROFESSOR OF ANATOMY IN KING'S COLLEGE, AND ASSISTANT-PHYSICIAN TO KING'S COLLEGE HOSPITAL.

LECTURE III.—PART I.

The Lymphatic System of the Pelvis and Abdomen.

THE *Internal Iliac glands* are very numerous. They lie between the external and internal iliac arteries, and correspond to the upper part of the great sacro-sciatic foramen. Into them pass the deep lymphatics of the thigh which accompany the gluteal, ischiatic, and obturator vessels; the lymphatics of the bladder; those from the vesiculæ seminales, vasa deferentia and prostate in the male, and from the vagina and neck of the uterus in the female. Others come from the ischio-rectal fossa, the perineum, and the hinder part of the scrotum or labia majora. The deep lymphatics of the penis and clitoris open into these glands also, so that diseases implicating the roots of these organs may spread in this direction instead of to the inguinal glands.

The lymphatics of the bladder were supposed by Cruikshank and Mascagni to be very numerous, but Sappey denies their existence. This is undoubtedly an error, for I have seen some myself, and Cruveilhier has observed them filled with pus. They are, however, very scanty, and are situated near the trigone, where there are also some lymph-follicles, in connexion with which they probably commence. The small number of lymphatics explains why injuries to this organ are, comparatively speaking, so rarely attended with lymphangitis, and why villous cancer, if limited to the interior of the organ and not invading the surrounding tissues, is so seldom complicated with secondary cancer of the glands. Most of the so-called vesical lymphatics figured by Mascagni in the male are derived from the prostate, vesiculæ seminales, and vasa deferentia. The lymphatics of the prostate are relatively large, and surround the racemose glands; they are easy to inject in the child, whilst in the old man they are very difficult to find; the venous plexus is then extremely developed. Four trunks pass, two on each side, along the posterior and lateral wall of the bladder to the lowest of the internal iliac glands.

The lymphatics of the vesiculæ seminales are extremely numerous, and spring mainly from the mucous surface, beneath which is a fine network. The vessels which proceed from this form a second network on the outside, whence two or three main trunks issue.

The lymphatics of the vasa deferentia extend all along their course, but are especially marked towards their ampullary extremities.

The lymphatics of the upper two-thirds of the vagina and of the neck of the uterus also pass to the internal iliac glands, and unite with the vesical lymphatics in their course.

The *Sacral glands* occupy the sides of the sacrum on its anterior surface. Several of them are placed in the meso-rectum and receive the lymphatics from the corresponding part of the intestine. They are very numerous, and, as in the intestine generally, come from both the mucous and muscular layers. Enlargement of the sacral glands is almost a constant sequel of cancer of the rectum, if the disease has existed for any length of time.

The *Lumbar glands* (from twenty to thirty on each side) are placed on the psoas muscles on both sides of the aorta and vena cava inferior. This position explains the compression or obliteration of the large vessels which so constantly attends enlargements of the lumbar glands. They differ greatly in size. The vessels which they receive are: (1) The efferent vessels from the pelvic glands; (2) the lymphatics of the body of the uterus; (3) those from the Fallopian tubes and ovaries; (4) those from the testicles; (5) those from the kidney and suprarenals.

The lymphatic vessels from the external and internal iliac glands form two plexuses around the corresponding bloodvessels, and unite in the lowest lumbar glands, where they are joined by the efferent vessels from the sacral glands. All the lymphatics of the lower extremities and the pelvic organs proper, after having passed through a greater or lesser number of glands, open at last into this lumbar group.

The lymphatics of the uterus were first observed in the human female by Méry, and have attracted the attention of many investigators. In the virgin they are difficult to detect, but increase so enormously in pregnancy that "when injected with mercury, the womb looks as if only made up of lymphatics." (Cruikshank.)

The superficial lymphatics form large subserous networks immediately under the peritoneum, on both the anterior and posterior surfaces of the organ; the deep lymphatics arise both from the mucous membrane and from between the muscular fibres. In the mucous membrane lymph-spaces lined by the characteristic flattened endothelial cells exist between the bundles of connective tissue, and also around the glands of the bloodvessels, so that these are only separated from the lymph-stream by an endothelial sheath. These lymph-spaces are continuous with the intermuscular lymphatics, which are arranged in successive strata, so as to communicate both with the mucous and subserous system. The communication with the former is by spaces rather than by vessels. The vessels from the body of the viscus converge to the sides, and especially to the tubal angles, whence they pass between the layers of the broad ligament, and, joining with those from the ovaries and Fallopian tubes, terminate in the higher lumbar glands. Some of them pass to a gland in the upper part of the obturator foramen (Cruveilhier), and one or two accompany the round ligament to the inguinal region, thus explaining the occasional but rare occurrence of inguinal cancer as secondary to uterine. The muscular and subserous lymphatics are furnished with valves, and dilate frequently into ampullæ not only in the uterus itself, but between the layers of the broad ligaments. In this situation there are several small glands. The lymphatics at the neck of the organ and around the os uteri pass with the upper vaginal lymphatics to the pelvic glands. Above and a little behind one side of the vaginal cul-de-sac is a small gland, which is often inflamed in diseases of the os and cervix uteri. The lymphatics of the uterine mucous membrane are nearer the free surface than the corresponding veins, and in the pregnant and puerperal female are especially developed around the site of the placenta. The uterine lymphatics are provided with valves, whilst no valves are found in the veins, either in the substance of the viscus or in the trunks outside.

Uterine lymphangitis has been generally confounded with uterine phlebitis. In puerperal cases the two affections may exist side by side, but they can be easily distinguished. The cavities filled with pus in the uterine tissue in such cases are frequently lymphatic ampullæ, and not true abscesses. This is shown by the seat of the vessels, the smooth wall of the cavity, and the fact that the pus is quite white, or cream-coloured, without any admixture of blood. Indications of valves in the cavity, and the absence of metastatic abscesses in the lungs and liver, as well as the extension of the disease to the adjacent glands, prove that the lymphatic system may may be quite as much involved, if not more so, than the venous. In cases of so-called peri-uterine cellulitis and pelvic abscess the following is frequently the sequence of the phenomena. In the first place there is a wound of the uterine mucous surface, engorgement, and inflammation of the lymph sinuses, leading to the formation of pus, and extension, either direct or by the cellular tissue, to the peritoneum. The inflammatory exudation is particularly noticeable where the cellular tissue is abundant—viz., in the broad ligaments and around the vaginal cul-de-sac. It may spread to the iliac fossæ and even to the lumbar region. In all these situations the lymphatics are very numerous. Sometimes the ovary is involved in the suppuration, and this is explained when we consider that the body of the uterus and the ovaries have a common lymphatic system. Peri-uterine cellulitis is really often a peri-uterine lymphangitis with infiltration into the surrounding connective tissue, and corresponds exactly to some cases of lymphangitis in the extremities. It may, of course, extend to the peritoneum, and undoubtedly there are many cases of primary

pelvic peritonitis. In a case described by Lucas-Championnière the mucous membrane of the uterus of a patient, two months pregnant, was cauterised, and she died of peritonitis. The lymphatics were filled with pus. Another point of interest is the enlargement of the pelvic glands sequential to a vaginitis affecting the upper part of the canal, or to the application of caustics to an ulcerated os uteri. These cases are analogous in every respect to the occurrence of a sympathetic inguinal adenitis in the male during a gonorrhœa or after the application of nitrate of silver to an ulcer on the penis. Again, are not many cases of so-called ovaritis really cases of pelvic adenitis, in which the swollen and painful gland has been mistaken for an ovary?

The testicle is remarkable for containing in proportion to its size a larger number of lymphatics than any other organ. They arise from the gland itself and from the epididymis, and are divided into superficial and deep, although these freely intercommunicate. The superficial vessels lie in the tunica albuginea, and may be injected with mercury with the greatest facility after puncturing the tunica vaginalis. The testicle then appears as if covered with a coat of quicksilver (Panizza). The deep vessels arise within the septa in lacunæ between the tubuli seminiferi, and at the upper border of the testicle at its posterior surface join the superficial set. The lymphatics of the epididymis are of small size; those of the vas deferens are mainly found at its commencement and termination, and the former, as well as those of the epididymis, join with the vessels from the testicle to form eight or ten large trunks, which ascend through the spermatic cord, and end in the lumbar glands. In this course they form a sheath to the spermatic vessels, and are placed outside them. Enlargement of the inguinal glands has occasionally been seen in cases of cancer of the testicle, but in such cases the scrotum has also been involved in the primary mischief.

The lymphatics of the kidney are generally described as superficial and deep, but their number is very limited. The superficial ones arise from lymph-spaces between the convoluted tubules of the cortex, but the origin of the deep is not known with certainty, although Rindowsky says that they begin in the Malpighian capsule in a plexus, and that they accompany the efferent vessels. They have never been injected directly, but fluids forced into the renal vessels under high pressure have been seen to pass into four or five trunks, which emerge at the hilus and pass to the lumbar glands. Although primary renal cancer does not usually kill so rapidly as cancer of most of the internal viscera, as a rule attaining to a very large size (in one case it weighed 31 lb.), yet secondary affection of the glands does not take place with the unerring constancy that it does in organs whose lymphatic system is more extensive, as the testicle, penis, and breast. Out of 51 cases collected by Roberts, in twenty no secondary deposits were found elsewhere. Co-existence of cancer of the kidneys and bladder is very rare, and is readily explained when we remember that very few lymphatics are found along the ureter, and that the lymphatic systems of the kidneys and bladder are quite distinct. The lymphatics of the suprarenal bodies are found both on the surface and in their interior. Although remarkable for their size and number, their mode of commencement has not been made out. They join those of the kidney before terminating in the lumbar glands.

The Cœliac glands.—The glands in the vicinity of the cœliac axis and superior mesenteric vessels are from sixteen to twenty in number, and are mainly placed behind the pancreas. The vessels which enter these glands are derived from—(1) the pancreas; (2) the spleen; (3) the stomach and upper part of the duodenum; (4) a part of the liver.

All the vessels which converge to these central glands first pass through a set of glands proper to the organ in which they arise. Thus there are numerous glands in the portal fissure; four or five along the lesser, and seven or eight along the greater curvature of the stomach; and eight or ten in the hilus of the spleen, and along the splenic vessels.

The lymphatics of the pancreas are very few. They arise in the interlobular connective tissue in close relation to the vessels, and end in the cœliac glands.

Those of the spleen are not very numerous, and the deep vessels can only be demonstrated by the same indirect method as those of the kidney. The superficial plexus is immediately under the capsule, and was injected by Dr. Alex. Monro, Secundus. In the ox they form a very distinct network of large vessels, which possess valves. In the human subject they are much fewer, and of smaller size. The deep lymphatics are continuous with the superficial through the trabecular framework of the organ. They accompany the arteries and form networks around the Malpighian corpuscles. It has been suspected that they primarily arise in the lymphoid tissue in the coats of the arterioles, but this has not been satisfactorily demonstrated. Four or five large trunks emerge at the hilus, pass along the upper border of the pancreas, and join some of the gastric lymphatics.

The lymphatics of the liver are very numerous and important. The superficial set spring from the superficial lobules, and form a network beneath the capsule. Each capsular branch of the hepatic artery is accompanied by a pair of lymphatics forming a sheath to it, and these are connected by short transverse branches. Those on the convex and those on the concave surfaces must be described separately. The former follow different directions; the median vessels pass into the suspensory ligament, the posterior into the coronary ligament, and the lateral ones into the lateral ligaments. The median lymphatics in the suspensory ligament divide into two sets: an ascending, which pass through the diaphragm close to the xiphoid cartilage, and enter a gland in front of the lower part of the pericardium, from which efferent trunks pass to the chain of glands by the side of the internal mammary vessels; and a descending, which pass over the lower border and join the superficial vessels from the concavity and the deep vessels which accompany the portal vein. The lateral lymphatics pass from the lateral ligaments along the inferior surface and pillars of the diaphragm to the cœliac glands. The posterior set course from before backward, pass through the central tendon of the diaphragm near the opening for the inferior vena cava, and terminate in a small group of three or four glands which are placed near that vessel between the diaphragm and pericardium. One or two of these vessels frequently join the deep set close to the inferior vena cava. The lymphatics from the under-surface of the liver spring from all parts of its surface and from the gall-bladder. Those on the right of the gall-bladder enter the glands between the aorta and vena cava; those on the left join with those from the lesser curvature of the stomach, whilst those from the gall-bladder (around which is a very large plexus) and its vicinity pass to the glands immediately behind the pancreas. Some of these generally unite with the deep lymphatics in the portal fissure. The deep lymphatics have for some time been known to form interlobular plexuses, which surround the lobules like the interlobular venous plexuses. More recently they have been traced into the lobule, and found to be in two distinct sets—one, the smaller, converging to the centre, like the capillaries (Carter), and the other in relation to the central vessel of the lobule in whose wall they have been injected (A. Budge). According to Macgillavry, the intra-lobular capillaries are surrounded by lymph spaces. The larger vessels are also arranged in two sets. Some run in the capsule of Glisson with the branches of the hepatic artery, portal vein, and hepatic duct. These emerge at the portal fissure, and pass into some glands there, from which efferent vessels proceed in the gastro-hepatic omentum to the cœliac glands behind the pancreas. The more numerous and larger set accompanies the tributaries of the hepatic vein, surrounding them in a sheath, and converges to the inferior vena cava. Five or six large trunks pass with this vessel through the diaphragm, unite with the posterior superficial lymphatics from the convexity of the liver, and end in the supra-diaphragmatic glands. Efferent vessels from these glands pass down on the thoracic surface of the crura of the muscle, and end in the thoracic duct just above its origin.

The spread of cancer along the lymphatics of the liver, and so through the diaphragm to the glands in the anterior mediastinum, is well known and easily explained when we consider the anatomical arrangement of these vessels. Thus Frerichs says that in two instances he has seen the lymphatic ducts filled with grey medullary cancer, and resembling knotted cords almost as large as a crowquill, running backwards over the upper surface of the liver from cancerous nodules at its anterior margin. The glands of the mediastinum in these cases were enlarged. It is often supposed that to take this path the hepatic cancer must be superficial, but this is by no means an essential antecedent when we consider the course of the deep vessels. Through the lymphatics hepatic cancer may extend to the glands in the fissure of the liver, in the anterior mediastinum, and to the cœliac glands. Frerichs also mentions the im-

plication of the deep cervical glands through the thoracic duct. Andral records a case in which, sequential to a cancer of the uterus, the internal surface of the thoracic duct presented at irregular distances small whitish bodies in great numbers and a little larger than a pea. They slightly projected into the interior, but were continuous with the wall of the vessel. Their appearance resembled in every respect, to the naked eye, the uterine growth. Similar nodules have been seen by Wagner in the pulmonary lymphatics in cases of cancer of the stomach.

The lymphatics of the stomach arise from the mucous membrane and from the muscular layers of the organ. They anastomose freely, and a network is formed of large and frequently dilated vessels on the surface beneath the peritoneum. The trunks pass from this in three directions: one group runs towards the cardiac orifice, accompanying the coronary vessels in the gastro-hepatic omentum, and unites with some of the hepatic vessels before terminating in the coeliac glands; the second group follows the right gastro-epiploic vessels to the back of the duodenum, and unites with the vessels from the first part of that viscus; whilst the third group runs with the left gastro-epiploic vessels towards the spleen, and, uniting with the splenic lymphatics, terminates in the same glands.

The mesenteric and meso-colic glands.—These are from 100 to 200 for the small, and from 20 to 50 for the large, intestines, and are placed with the bloodvessels between the folds of peritoneum enclosing the intestine. In the upper part of the mesentery they are in three rows—one row of small size near the intestine, another at some little distance, and the third (much the largest) near the origin of the superior mesenteric artery. Many glands in the last row may be fused together. The farther the intestine is from the root of the mesentery the more scattered are the glands; the lower part of the ileum is not in relation with nearly so many glands as the commencement of the jejunum. Near the termination of the ileum the glands are arranged in a single row, but along the large intestine a second small and insignificant set is placed at some distance from the bowel. The origin of the lymphatic vessels of the intestines was fully described in my last lecture.

Clinical Lecture
ON
CASES OF INTEREST OCCURRING DURING THE FIRST TERM OF THIS SESSION IN SOME OF THE LOCAL HOSPITALS.

Delivered at the Cork South Infirmary and County Hospital,

BY PROF. H. MACNAUGHTON JONES, M.D. &c.

GENTLEMEN,—At the commencement of the second term of this session I have determined to address to you a few words on some cases of interest which have been treated in some of the hospitals connected with this school, to which you have had access, and which have been under my care. And here I must, in passing, express a regret that many obstacles exist in this school which it is difficult for students to overcome in the pursuit of practical work. Of these, at present I desire to refer to two prominent ones. In the first instance, I cannot but regard the great division of surgical and medical work in this city, through the existence of so many small hospitals apart from each other, as most unfortunate. In a comparatively small city like Cork, it is much to be deplored that the work is not more concentrated. It is clearly impossible that a student can hope to practically educate himself, midst a crowd of others, in a small hospital in a provincial town, with only from fifty to seventy beds on an average occupied, and without any special departments. It is essential for him to see, if possible, every case of importance treated in any of the hospitals to which he has access. In all special departments I can testify to the great ignorance of our students. Yet in our special hospitals in this city cases of unusual interest are continually occurring which are never brought under the notice of the majority of our pupils. Let me beg of you, then, to travel a little out of the beaten track. There is no reason why a student in our school should not make himself acquainted with several of the special branches. I refer to-day to the following cases to bring this fact home to you. The second matter I wish to speak of is the interference with *hospital* work by the early attendance required at our local college. The college is nearly a mile from this hospital, and, as the physicians and surgeons do not visit here till nine and half-past nine, and frequently later on in the mornings, the students have not time to do their practical work properly before starting for the college. Either the lectures and demonstrations should begin later, or the staff here should attend earlier and very punctually. To prove to you, then, the importance of attending at all the hospitals as frequently as you can, I take this opportunity of reminding you of these cases, occurring here and elsewhere during the past few months. I limit my observations chiefly to cases treated by myself, though there have been, as you are well aware, several others treated by my colleagues equally worthy of your attention and thought.

Strangulated Inguinal Hernia; operation; recovery.

Somehow the operation for strangulated hernia is not often performed in our wards or theatre; nor is strangulation requiring operative interference a frequent occurrence here. Why this is so I cannot explain. But the inference is clear, that you should see every case presenting itself, and carefully follow it to its termination. This one I now refer to was an instructive example of life saved by operation. Several lectures might be devoted to the study of this subject. I must be content with pointing out the particular features of this case which teach us a few lessons not to be forgotten.

A respectable woman, aged sixty years, was brought into the Women's Hospital on Nov. 29th. She had had previously obstinate constipation, notwithstanding enemata, saline purgatives, and a dose of calomel. The costive state was followed by the characteristic gulping vomiting of strangulated hernia, a general tenderness over the abdomen, and colicky pain. The patient never had noticed any swelling in health, and the illness commenced with a violent cough, which still continued. I saw her at her own house the day of admission. She then directed my attention to a swelling which she stated she noticed for the first time the night previous in the right inguinal region. On examining her closely this small tumour was barely perceptible, save by the feel; hard, tense, non-fluctuating, fixed, very painful to the touch; in fact, like a large marble stuck in the inguinal canal, and forcing its way through the external ring. As her countenance was then becoming anxious, and the vomited matter dark-coloured, her temperature being 99°, and her pulse 110, rapid and wiry, I advised immediate removal to the Women's Hospital. I at once saw that this was one of those cases where delay in operation would be culpable, and in which the constitutional symptoms following on the obstruction clearly pointed to a strangulated portion of bowel as the cause. When I got to the hospital at 4 o'clock I found her still worse, constantly vomiting, moaning with pain, which was increased by the violent cough. With my colleague Dr. Grattan I decided to operate at once. He had, however, some misgivings as to the swelling being actually a portion of bowel. After an enema was administered, I placed her under the influence of ether, and operated in the usual manner. I found immediately the sac, not much congested, strictured in the ring and the short fibres of the intercolumnar fascia, here acting on the constricting band; these were divided with the hernia knife as usual, and on passing up my finger, the bowel not returning, I found a second constriction at the internal ring; this I also divided by turning the edge of the knife carefully against it, in a direction upwards and outwards. Immediately the bowel returned with a gurgle. I did not open the sac. Passing my finger then in through the internal abdominal ring, I swept it round to ascertain that all was right. I then closed the wound with a few silver sutures, dressed it antiseptically, and had the patient carried to bed. The entire steps were conducted antiseptically under the steam spray. Immediate relief followed. She never vomited subsequently to the operation. The after-treatment consisted mainly in keeping the bowels quiet for some days, the administration of opiates, antiseptic dressings to the wound, attention to the cough, which was very severe, and the administration of an enema

on the third day after the operation. Some slight peritonitis threatened with tympanites about the fourth day, but it all subsided, and she has perfectly recovered. Several of you saw the operation, and to others I pointed out the site of the hernia, now completely obliterated, before she left the hospital. Before dismissing this case let me remind you that it was early operation saved this woman, that the sac was not opened, that the internal ring was thoroughly explored, and that the entire operation and the subsequent steps were carried out in a thoroughly antiseptic method. Surgeons have laid down golden rules for your guidance in respect to early operation; remember that one specially, "When in doubt, operate." You may, indeed, often regret operating too late, whereas the symptoms which demand early operation are so clearly defined that you can hardly conceive a case in which you will operate too soon. Let me recommend for your perusal, besides the admirable articles in your text-books, Erichsen, Bryant, Druitt, and Holmes, the chapters on hernia in those clinical lectures, unsurpassed in the literature of British surgery, by Sir James Paget.

Transplantation Operation for Deformity of Eye and Face.

Many of you saw a man who gave us as his history that about a year since, when away at sea, he was struck in a storm by the wheel in the face, and horribly mutilated. He had cicatrices in different parts of his head, and one large scar, which ran down his forehead, a second passing across this at right angles. He had the entire lower eyelid cut clean away, leaving a broad red surface of mucous membrane, which, with the white scars on his face, gave him quite a ghastly look. So much was this the case that he stated he would not be taken on board any vessel, and implored me to do something to assist him to earn his bread.

FIG. 1.

Though, as I pointed out to you at the time, a most unpromising case, I determined to give him the benefit of a transplantation operation. Below the red surface was a second cicatricial band. I made a V-shaped incision, including a portion of skin, the base of which was equal to the lower eyelid, the wings of the V running down from either end of the raw surface, and meeting about an inch below. I dissected this triangular flap up, and with it the raw surface, turning it in to form a lower eyelid. I fixed this new lid with sutures. I took now a good-sized portion of skin from the temple, brought it round, laid it on the exposed surface, attaching it by sutures to the healthy skin, and to the eyelid I had just formed. Finally, I brought the margins of the temple-wound together. Many of you saw him at the Ophthalmic Hospital. There is now but a very slight ectropion, and the man cannot be refused employment, as there is no longer deformity. I show him to you here to-day, and you can for yourselves see the improvement.

Enucleation of the Eye.

There were three cases of enucleation of the eyeball—one for injury and destruction of the globe; the other two I shall briefly refer to.

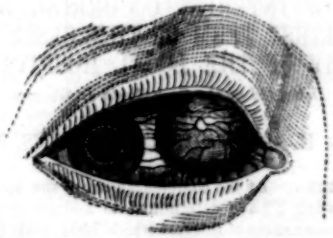
Mrs. ——, aged sixty, consulted me privately in October. She was then suffering from a formidable warty-looking growth of the inner surface of the eyeball. It was of a deep-blue colour, evidently highly vascular, being subject to occasional attacks of bleeding, but movable. The conjunctiva all round the wart was considerably thickened and highly vascular. It encroached on the cornea, which it partially concealed. The entire eyeball was congested, and had a dark and angry appearance. I furnish you with a sketch of the eye as I took it at the time (Fig. 2). My first impulse on seeing the eye was to enucleate. On carefully examining the wart, however, I determined to remove it by ligature. This I did subsequently, with fine silk, transfixing the base of the wart, and strangling it with a small figure-of-eight liga-

FIG. 2.

ture. There was some hæmorrhage at the time, which was easily controlled. The wart fell off on the third day, and I hoped all would go well; but the general congestion continued, and by degrees, first necrosis, and secondarily suppuration of the cornea set in. Every means, such as eserine, leeches, vesication, seton, kerototomy, &c., was used to arrest this latter without effect. The eyeball suddenly became much swollen, intensely livid and dark-looking, and there were a few attacks of hæmorrhage. I enucleated the eye, and found the interior of the ball full of blood. I had, not long since, a similar case, in which, with a ligature, I removed a like wart with a perfect result. I cite this case, as it grievously disappointed me, and resisted my utmost efforts to insure success. I dreaded implication of the other eye, and also the advent of malignant disease. I did not consider the wart itself, in the first instance, malignant; but the ugly appearance assumed after removal alarmed me, I am happy to say without just grounds, as the patient has perfectly recovered the operation. There was some severe hæmorrhage from the eyeball before the operation, and after enucleation the vitreous was found full of blood.

The other case was one of considerable interest, and, as I had a few students present, although occurring in private, I allude to the case here. In December, 1877, Mr. —— consulted me for a cystic tumour of the eyeball. The sight of the right eye had been lost for four years, and he dated the commencement of the mischief in or about the year 1872. He then got a stroke of a bramble-bush. There was little pain save at times. His general health was good. The eye presented the appearance shown in

FIG. 3.



The growth projected upwards under the upper eyelid in the direction and to the extent of the dotted lines. Of late the fellow-eye, he said, was not as strong as formerly. There was no reflection from the fundus. I advised enucleation. The patent went away, and I did not see him until last October, when he came with the eye as depicted in Fig. 4. The tumour had assumed a livid appearance; the deformity then was extreme. I enucleated the eye on the 21st of October, under ether. He recovered rapidly. The tumour fortunately did not involve any of the parts in the orbit, and the optic nerve was quite healthy. He now wears an artificial eye. Dr. Atkins, who assisted me at the operation, took the tumour away for microscopical examination, but as yet it has not sufficiently hardened for the purpose.[1]

In the hospital also there has been an interesting case of

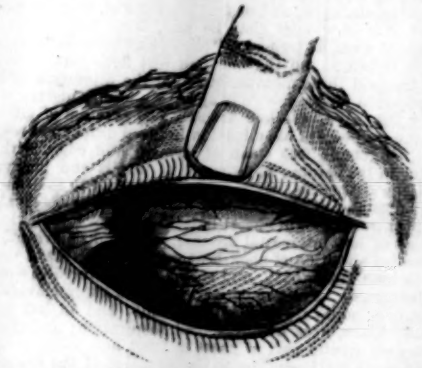
Congenital Cataract

treated by solution, in a boy aged fourteen. I thought the lenses of too solid a nature to attempt suction. He left to go out at Christmas with the lenses almost completely removed. There has been also a case of cataract removed successfully

[1] Vide Dublin Journal of Medical Science.

after fifteen years' duration; and an anxious case of traumatic cataract, with wound traversing the entire cornea, where I feared sympathetic mischief, but in which there has been a most successful issue after iridectomy, followed by evacuation

FIG. 4.



of the lens matter. You have seen the value of eserine in various cases of corneitis, suppuration of the cornea, marginal ulcers, &c., many times proved. We have had an unusual number of cases of optic neuritis, one of which you saw discharged able to read $\frac{1}{18}$ S. with the affected eye; when admitted she was barely able to count her fingers. The treatment consisted of a mild mercurial course, followed by large doses of iodide of potassium, and, locally, atropia, setons in the temples, and the use of smoke-preservers; alternately a course of strychnine in doses of the thirty-second of a grain, completed the cure. An interesting case of congenital luxation of both lenses upwards in a girl, and a case of corectopia, or eccentric pupil, with displacement of the lens, have also occurred.

Aural Polypi.

Nothing of special interest has occurred in the aural department. There have been several cases of aural polypi. One morning I removed the three typical forms of polypi from three individuals in the extern department—fibroid, fibro-gelatinous, and the vascular, using Wilde's snare for the first two, and the lever ring forceps of Toynbee for the latter. Chloro-acetic acid I almost entirely employ to destroy what remains of those troublesome tenants of the auditory canal or tympanum. I find my aural probe, which I show you, armed with cotton wool in this fashion, the most perfect means of applying this acid, or any other agent, to the tympanum. I contrived this probe about a year since, finding the wire too troublesome and tedious a method. With this I work quickly, screw on or off as many pieces of wool as I want, and make the point of the wool as fine as I wish to touch minute growths. There is no chance, with care, of the wool remaining in, as you can make it as firm as you like to the probe. In a few minutes with this instrument you can cleanse an ear thoroughly of all discharge, dry it, and touch the part with any agent you desire to employ.

(To be concluded.)

ON INCONTINENCE AND RETENTION OF URINE IN CHILDREN.[1]

BY W. F. TEEVAN, B.A., F.R.C.S.,
SURGEON TO THE WEST LONDON AND ST. PETER'S HOSPITALS.

Incontinence of urine embraces a wide field, affecting as it does, not only male, but female children. Its causation is often difficult to elucidate, and its treatment unsatisfactory. The great point is to make out the diagnosis, for unless this be done all treatment is simply empirical. It is not my intention to investigate the medical phenomena of the complaint, which are often inscrutable, but to impress strongly on my hearers the necessity of a physical examination in all cases; for if the cause of the malady be surgical, we may usually effect a cure without delay. If, on the other hand, a surgical origin cannot be elicited, a long period of unsatisfactory treatment is too often in store for the patient.

The surgical causes that may give rise to incontinence are: 1. Rectal complaints, such as piles, fistula, excoriations. 2. Ascarides. 3. A tight foreskin. 4. Congenital insufficiency of the external urethral orifice. 5. A calculus impacted in the urethra. The above are fertile causes of the complaint, and all remediable. All of them set up and keep up irritation, and produce incontinence by reflex action. Probably of all the above causes the fourth and fifth are but little suspected of giving rise to trouble. A tight foreskin is a common cause of complaint, and I always advocate its removal, as it is usually followed by the best results. It is well known that the meatus externus is the narrowest part of the urethra, but the relation of its size to the rest of the canal is perhaps not so much attended to as it ought to be. There is a general belief to the effect that so long as there is a hole it suffices for micturition. This, however, is erroneous. If the relation of the calibre of the external orifice to the general urethra be disproportionate, the result is that the urine cannot escape as fast as it ought to do, and irritation is set up in the peripheral extremity of the nerve, which disturbs the vesical centres. For instance, if a boy of twelve or fourteen years of age have a meatus that will only admit a No. 3 catheter, and be suffering from incontinence, we ought at once to suspect that the local obstruction is the cause. I have so often seen this to be the case that I invariably look for it. A well-marked instance of how such a cause can act and how it can be removed was well seen in a young gentleman put under my care by my friend Dr. Fothergill. The unfortunate patient had suffered from incontinence from birth, and had been physicked by many eminent physicians for years. Tonics and sea-bathing were all in vain. On examining the patient I found that, although he was fifteen years old, his meatus externus was not larger than a new-born babe's. I incised the orifice, enlarging the calibre to a No. 12 English catheter. By this simple operation the boy was cured of his incontinence, which was nocturnal. The profession has long recognised the congenital contractions of the anal orifice, but no attention has been paid to similar defects of the urethral aperture. I would therefore very strongly urge the necessity of an examination of the calibre of the meatus externus to determine its sufficiency or not for the purpose it was designed. Now as regards the last cause of incontinence—a stone impacted in the urethra. If I could not discover anything wrong with the rectum or urethral orifice, I would pass a very slender sound, having a beak only half an inch long, to ascertain if there were any stone impacted in the urethra. It is not generally known that a stone in the urethra may give rise to incontinence or retention, according to where it may be situated. If the calculus has only just entered the meatus internus, it will be firmly and accurately embraced by the sphincter, so that no urine can escape along the sinuosities in the stone. If, however, the stone advance half an inch further, incontinence will be the result, for the calculus will then act as a gag, and prevent the sphincter from closing, and the urine will dribble away along the sinuosities of the stone. For a knowledge of this fact I am indebted to Civiale's works, and in several cases of incontinence it has enabled me to detect a stone impacted in the urethra. It might be at first sight imagined that if a calculus be impacted in a boy's urethra, it would give rise to great pain and discomfort, but this is not so. As the urine dribbles away, the stone may cause but little annoyance; indeed, I have known patients who have had calculi impacted in their urethræ for years without being aware of it, so little discomfort was there caused. Therefore it would be well not to be misled by the quiescence of the parts. In cases of incontinence where a surgical cause cannot be elucidated, I have found belladonna most useful where the complaint was only nocturnal, as also Sir D. Corrigan's plan of sealing the meatus externus with collodion at bedtime. Strychnia is indicated where the incontinence is diurnal as well as nocturnal. Blistering and an exclusively milk diet must not be lost sight of. If all means fail, the application of a mild solution of nitrate of silver to the neck of the bladder is justifiable.

Retention of urine in children is usually due to one of three causes: (1) congenital contraction of the meatus externus; (2) phimosis; (3) stone. The first two causes can

[1] Read before the Harveian Society on Feb. 6th, 1879.

be at once determined by ocular inspection. Every now and then a child is born with a meatus externus only large enough to admit a pin, so that the urine cannot escape, or only escape in such small quantities that it accumulates faster than it can be excreted. To such a case I was called by Dr. Moxey, of Turnham-green. A small incision suffices to relieve such cases. It is important to keep the enlarged orifice patent by means of a plug of oiled lint, or rapid contraction will take place. A tight foreskin is a fertile cause of complaint. The contraction is often so tight that it is very difficult to introduce a whalebone bougie as a guide. The accumulation, however, of the urine between the gland and the foreskin causes the latter to be distended, and thus fixes the part, and renders the introduction of the probe or bougie easier than it otherwise would have been. The relief given by an operation in such a case is of course immediate and permanent. If no phimosis or contracted orifice be discovered, we may rest assured that a stone is the cause of the complaint. A short time ago a woman brought her little child to me with this history:—A few days previously her son was unable to make water, and she took him to a hospital. The house-surgeon drew off the child's urine, and sent him home. What result, to the non-professional mind, could have been more felicitous? The next day, however, the child was again attacked with retention, and was brought to me. I then stated to those gentlemen present that, as there was no phimosis and the meatus was of good calibre, the retention must be caused by a small calculus. I accordingly first introduced a small soft olivary catheter, and drew off the urine; I then passed a slender sound with a very short beak, and detected a stone. A week later I cut the boy and cured him. It may appear to some that it would have been easier to discover a calculus in a child when its bladder was full rather than empty; this, however, is not so. If a stone cause retention, it must be a very small one, and will, therefore, be found lying at the neck of the bladder, and will be struck as the sound enters that organ. If the bladder be examined when distended, the surgeon will have to grope about after the calculus, and perhaps not find it. If, on the other hand, he sound the patient when his bladder is empty, the stone will be brought to him. However, to effect such an examination efficiently, a sound with a beak not more than half an inch long will alone suffice. I need hardly say that extreme gentleness is required when sounding a child for stone. In boys the bladder is an abdominal organ rather than a pelvic one, and peritonitis is easily induced by a prolonged or rough sounding, and cases are on record in which children have died after sounding. Depend upon it, therefore, if a child is brought with retention, and you cannot find either a phimosis or a contracted meatus, the retention must be due to a stone. In all these instances which I have related, the cause was physical and remediable, and the cures effected absolute and permanent.

UNUSUAL SEQUEL OF HÆMOPTYSIS.

By BERNARD O'CONNOR, A.B., M.D.,
PHYSICIAN TO THE WELSHPOOL DISPENSARY.

ALTHOUGH profuse pulmonary hæmorrhage, whether due to tubercular phthisis or to organic cardiac mischief, generally ends in speedy collapse, unless the depression consequent upon the loss of blood is followed by reaction within a few hours, life may occasionally be prolonged, at least for several days, in the absence of any reaction whatever, as will be seen from the following:—

About noon on the 30th January last I saw for the first time James M——, aged fifty-five years last September, a member of a company of strolling players. Judging from appearances as the patient lay on his back in bed, he was a well-built man about five feet nine inches in height. In a voice indicative of laryngitis, painful to hear, he informed me that he had enjoyed perfect health up to last October, when there commenced a troublesome cough, which had continued ever since. He had always drunk freely of beer and spirits (chiefly the former), and about ten years ago had suffered in the right side from pleurisy or inflammation of the lung—he did not know which. Under the combined influences of his never having spared his vocal organs in his histrionic pursuits, of occasional "colds" (contracted probably through repeated changes of dress in the course of the performances in the ill-protected, roaming, theatrical caravanserai), of efforts to speak down a noisy though possibly an admiring audience, and of free libations of beer between the acts, it is no wonder that he had, from time to time, experienced what he termed a "slight shortness of breath." His wife informed me that he had lost flesh considerably during the past three months, but that the alteration in his voice occurred only a few days ago. No family history was forthcoming. Well-marked arcus. The exertion of sitting up for the purposes of examination induced quickened respiration; his tongue was clean at the tip and edge, with a moist fur in the centre; appearance of tonsils and pharynx normal; no dysphagia. Skin warm and greasy to the touch. Marked diminution of respiratory movement was observable over upper front of right chest; flattening below left clavicle; retraction of left intercostal spaces; only slight elevation of chest walls; situation of apex-beat normal. Increased vocal fremitus over front, back, and sides; cardiac impulse somewhat increased. Dulness on percussion in supra-clavicular and supra-scapular regions on each side, and in left subclavicular space, even during forced inspiration; and slight dulness over greater part of chest in front and sides, except over the space corresponding to the situation of the bronchi, where a tubular percussion-sound was audible; percussion faintly tympanitic below right clavicle. Bronchial respiration right and left in front; bronchophony right and left in front and back; mucous râles, chiefly over back; crepitant râles in many places, and cavernous rhonchus, well marked after a deep inspiration, here and there behind; distinct pectoriloquy (accompanying a subdued voice) below right clavicle, and occasional metallic tinkling over the same area during deep and forcible coughing. Cardiac sounds normal, but audible over the whole of the chest. An incessant hollow cough brought up muco-purulent sputa of a greenish-yellow colour. The patient had never spit blood, and up to the previous few weeks the expectoration had been white and frothy. Pulse 104, small, feeble, and slightly tortuous; respiration 32, irregular in force; temperature 37·5° C. No history nor symptoms of syphilis, hæmorrhoids, or renal disease. Urine: sp. g. 1022; urates; no albumen.

This well-marked case of tubercular phthisis in the third stage continued under daily observation. Treatment succeeded in allaying the distressing cough, which had caused many restless nights, and in checking outbursts of diarrhœa, and in a general way rendered the patient more comfortable. On Feb. 1st there was a slight mixture of blood with the sputa. This yielded to a few doses of acetate of lead, but returned on the 7th. On the 9th there was an improvement in the appearance, manner, and general condition of the man; the thoracic sounds were much the same as at the first examination. On the morning of the 10th, sudden and profuse hæmoptysis occurred at 8.30; by 10 o'clock the hæmorrhage had become considerably less; there was hardly any action of the thorax, the respiration (60) being chiefly cervical and abdominal; percussion elicited universal dulness; no respiratory murmur observable; pulse 140, small and compressible; distinct aortic bellows-sound, never before detected; temperature 36° C. Towards noon the patient became partially comatose, though still able to throw out dull-red sputa in any and every direction. During the afternoon the attendants perceived from time to time spasmodic twitchings of the left arm and leg. By 9 P.M., well-marked clonic contractions of the muscles of the left arm alternated with similar movements in the leg of the same side, and during the occurrence of these a period of repose was observable in the left upper limb. I learned the next morning that these movements had continued until daybreak. At 9 A.M. on the 11th I found the left limbs motionless and lax; no appreciable movement of the thorax, nor of the muscles of the left side of the abdomen; the umbilicus seemed drawn over to the right during each act of abdominal respiration, which was limited to that side. This was a state of things most curious to behold. Hearing continued sensible to sounds; the eyelids moved in response and in unison; the right pupil was somewhat dilated; no movement was detected in the eyeballs, each of which appeared somewhat more prominent than before; muscular reflex in right limbs feeble, but distinct. Temperature 34·4° C.; Sphincters apparently paralysed; no œdema of ankles.—4 P.M: Continuous and rapid quiver-

ing of eyelids; as rapidly was the right eyeball "jerked" upwards and outwards; left eyeball motionless; no abnormal movements of maxillary muscles, nor of tongue; powerful action of cervical muscles; clonic spasm of muscles of left limbs; those of right side motionless. All these convulsive movements would abate for a few minutes, during which the patient would feebly blow out thick sputa, and the respiration (such as it was) would be almost unnoticed, when suddenly the convulsions would return, accompanied by an elevation of body-temperature of about 2° C. Dry-cupping had been employed all over the front and sides of the chest as soon as possible after the profuse bleeding on the 10th; the resulting circles on the right side were now livid, but those on the left could hardly be distinguished. A similar observation had been made as early as the 8th, respecting the effects of two mustard poultices applied right and left behind—that on the left producing hardly any change of colour, while the right side was almost blistered. Convulsions became less marked towards 10 P.M.; they had ceased at 9 A.M. on the 12th. Complete coma set in in the afternoon, and death occurred about 5 A.M. on the 13th. No post-mortem examination was made.

I do not remember hearing or reading of or seeing any case of hæmoptysis similar to the above, or presenting so many features of singular interest.

We have first of all to consider the points that bear more immediately upon the hæmoptysis. We may assume, first, that an extensive miliary deposit (pulmonary tuberculosis), acting mechanically, brought about a congested condition of the lungs and consequent obstruction to the passage of blood from the right side of the heart; secondly, that the condition of tubercular pneumonia, thus set up, offering an impediment to the free onward movement of blood in the superior cava, acted as a *vis à fronte* through the azygos major and left superior intercostal veins, causing a rupture of the bronchial capillaries and consequent hæmorrhage through the mucous lining of the larger divisions of the bronchi; a portion of the blood thus poured forth was coughed up, and escaped through the mouth during the hæmoptysis; the other portion was drawn in an opposite direction, to be ultimately closely packed in the air-cells of all the lobules in connexion with those bronchial ramifications which had been traversed by the blood during a forcible inspiration—in fact, bringing about a condition such as would in Laennec's time have been styled "pulmonary apoplexy."

But what caused the hemiplegia? Were the cerebral lesions due to a kind of serous *plethora capitis* (resulting from thoracic venous obstruction), notwithstanding the absence of all turgescence in the neck and the presence of a thread-like pulse? Or, on the other hand, were the palsy and the epileptoid convulsions which preceded and followed it the effects of cerebral softening directly resulting from the loss of blood? The man's age (fifty-five) and statements, already made, would favour the suspicion of atheroma. The hæmorrhage was clearly responsible for the systolic bruit. The early appearance of partial coma might be traceable to non-oxidation of the blood, due to the altered condition of the lungs.

Apart from the above are a few facts worthy of mention, though having no direct bearing on the hæmoptysis itself. We notice an interruption to the normally equal connexion with each of the corpora striata on the part of the nerves supplying the left abdominal muscles, the action of which in health is simultaneous with that of those of the opposite side. Again, the order in which the cerebral lesions occurred challenges consideration. Cerebral irritation in some form was set up, but the alternating character of the movements of the left arm and leg is not easy of explanation, especially as it preceded the palsy of these limbs. The affection of the portio dura of the seventh and of the third and sixth cranial nerves clearly indicated that one seat of mischief within the skull was above and below the fourth ventricle; but it is curious that the influence of the portio dura was observable only in the orbiculares palpebrarum. To conclude, the ecchymosis of only the right side of the thorax after cupping, and the non-elevation of temperature on the subsidence of the hæmoptysis, deserve notice.

Welshpool.

MR. HERBERT A. LAWTON, of Poole, has received a Government gratuity for efficient vaccination in his district.

ON THE

TREATMENT OF UNHEALTHY LOCAL AND SYPHILITIC SORES BY IMMERSION.

BY ARTHUR COOPER,

LATE HOUSE-SURGEON TO THE LOCK HOSPITAL.

THE method of treating phagedænic and other ulcers by more or less prolonged immersion of the patient in warm water is by no means new, having been employed for many years by Hebra in syphilitic and other diseases of the skin; while in this country Mr. Hutchinson, who, I believe, introduced it, has repeatedly called attention to its value. Mr. Coulson[1] also has published cases treated in this way. Dr. Simmons,[2] of Yokohama, and Dr. R. W. Taylor,[3] of New York, have likewise written in favour of the plan. Weisflog[4] makes use of a "faradising" bath as follows:—One of the electrodes is connected with the bottom of the bath, and as soon as the wound is submerged in the warm water the patient touches the other electrode, which is covered with sponge, with the tip of one finger, gradually bringing the other fingers into contact with the sponge, according to the sensations he experiences in the ulcer. Pain is said to cease almost immediately. Mr. Hutchinson[5] combines irrigation with immersion, the patient being supplied with an irrigator, by means of which a forcible stream of water is to be directed on the sore while he sits in the bath. In France, M. Hémard[6] has for more than twenty years been in the habit of treating chancres by irrigation with cold water for one minute seven or eight times a day.

The following is the plan of treatment which was followed at the Male Lock Hospital during the time I was house-surgeon there:—The patient sits in an ordinary hip-bath, containing sufficient water to ensure constant submersion of the affected part, for eight or ten hours a day. If the disease be in the groin, a full-sized bath, in which the patient can recline, may be necessary. The temperature of the water is regulated by means of a thermometer, and is kept as near 98° F. as possible by the removal and addition of small quantities of water at frequent intervals, without disturbing the position of the patient, and in winter the bath is placed near a fire. The exposed parts of the body are covered with blankets. In the evening, finely-powdered iodoform or other dressing is applied, and the patient goes to bed as usual. Next morning the dressing is allowed to separate in the bath, the pain attending its removal being thus avoided. The bath is repeated day after day as long as may be necessary, general treatment, according to the nature of the sore, being carried on at the same time. A good purge is beneficial at the outset, followed by iron, quinine, or ammonia and bark with opium, in local sores, and by appropriate specific remedies when the patient is syphilitic. A liberal diet, with plenty of milk, and little or no alcohol, answers best as a rule. Though men only are here referred to, it need hardly be said that the same treatment is equally applicable to women. A severe case of phagedæna in a female forms the subject of Dr. Simmons's communication already noticed.

I have notes of thirty-one cases treated as above during 1876 and part of 1877. They were under the care of Mr. Alfred Cooper and of Mr. Milner, to whom I am indebted for permission to publish them. These thirty-one cases include twenty-two of phagedænic or sloughing sores of the prepuce or glans penis or both, of from a few days to several weeks' duration; two cases of sloughing after circumcision; one case of slowly extending phagedænic buboes in a non-syphilitic subject; one case of acute phagedæna of the sheath of the penis, in a patient with syphilis of nine months' duration; one case of tertiary ulceration of the

[1] A Treatise on Syphilis (1869); and Medical Examiner, vol. ii. 1877, p. 350.
[2] New York Medical Record, 1875, p. 612.
[3] Archives of Dermatology, 1876, p. 183.
[4] Virchow's Archiv, B. 66; and THE LANCET, vol. i. 1877, p. 290.
[5] Brit. Med. Jour., vol. ii. 1872, p. 497; and Med. Times and Gaz., vol. i. 1877, p. 385.
[6] Quoted by Jullien, Traité des Mal. Vén., 1879, p. 404, from Recueil de Médecine et de Chirurgie Militaire, 1870.

glans; one case of tertiary ulceration involving the whole penis and part of the scrotum; one case of slow phagedænic ulcers of the prepuce and thighs; a case of very rapid sloughing phagedæna of chancre and bubo; and a case of gangrene of nearly the whole body of the penis.

As the limits of this paper will not allow of my giving the cases in detail, I shall only briefly notice their leading features. The shortest period during which the bath was made use of was one day; the longest was twelve days. Most of the twenty-two comparatively recent cases of phagedæna or sloughing attacking a chancre, or the initial lesion of syphilis, became healthy in from two to six days, and a few slight ones became so after one day. The most severe case was that of a strong healthy-looking man, aged twenty-one, in whom a local sore on the penis and a bubo in the left groin were attacked by sloughing phagedæna, which extended so rapidly that in a few days the cavity in the groin had the diameter of one's fist. Here the sloughing ceased to extend after four days, but the bath was continued for eight days afterwards. Both chancre and bubo then rapidly healed. The case in which nearly the whole of the penis was lost was that of a man of broken-down constitution and drunken habits, aged fifty-seven. No satisfactory history could be obtained beyond the fact that a sore had appeared about two days after connexion, a month before admission into the hospital, by which time about two-thirds of the penis had sloughed. There was no extension after one day in the bath, and after four days the whole of the slough came away. In three weeks from the time of admission the patient went out with a stump about an inch long and nearly healed. There were no signs of syphilis.

In three cases[7] morbid action reappeared, the ulcers having been healthy when the bath was discontinued. Perhaps in these it was left off too soon, or continuous immersion day and night might have succeeded. However, one of them got quite well eventually under other treatment. One was lost sight of after attending for some time as an out-patient. In the third the parts were quite healthy and healing when he was discharged, after having been three months in the hospital.

In three instances failure resulted. The first of these was a case of malignant syphilis with a very large sloughing primary sore, the patient being at the same time almost covered with an ulcerating syphilide. After nine days of the bath he refused to continue it. In the second case failure was due to the man being too stout to sit comfortably in the bath. The third and most complete failure was in a man who had suffered very severely from tertiary syphilis, and in whom the whole of the penis and part of the scrotum were involved in one large unhealthy ulceration. The pain was intense, and the patient said the bath aggravated it. The parts, after some time, healed entirely under large doses of iodide of potassium and opium and the local application of thick layers of cotton wool. This is the only case I have seen where pain was not quickly relieved by immersion. Mr. Coulson[8] has recorded an instance in which the bath failed, although continued for eight successive days and nights, as well as during thirteen days, the patient being allowed to go to bed during the night. Mr. Hutchinson[9] also mentions an unsuccessful case.

In order to obtain the full benefit from immersion it is necessary to bear in mind a few practical points. First, care must be taken to see that the affected part is thoroughly and constantly submerged; the penis has a tendency to float, and if the supply of water be too scanty, and the extremity of the organ be the seat of the ulcer, this may be altogether above the surface, and thus failure will occur. It is also imperative that the whole of the unhealthy part be exposed to the action of the water; if phimosis prevent this the foreskin should either be slit up or removed altogether. When the prepuce is simply divided the edges of the wound always swell more or less, and sometimes so much that the glans becomes almost buried, the discharge does not get freely away, and the length of time necessary for immersion is prolonged; besides, a subsequent operation to remedy the deformity is generally necessary. Two lateral incisions, as recommended by Dr. R. W. Taylor,[10] answer very well in completely exposing the parts, but here, also, a second operation is required for the removal of the flaps. Circumcision gives the best results, and was practised in several of the above cases, and as the wound, under immersion, scarcely ever takes on the diseased action, it may usually be done without fear. In case of troublesome hæmorrhage, either after operation or otherwise, solution of persulphate of iron may be applied, a bandage put on, and the bath deferred until the following day. Protection of prominent parts of the patient's body should not be forgotten. A few folds of an old blanket for him to sit on, and the same behind his back, answer very well in a hospital; but in private practice air- or water-cushions may be used. Dr. Simmons recommends a large sponge for the patient to sit on. The bath should invariably be continued for at least a day after the ulcerated surface has become quite healthy, though it may often be continued with excellent effect until the sore has nearly or quite healed. Lastly, whenever the bath, limited to the daytime, fails, continuous immersion, as advised by Mr. Hutchinson, should always be resorted to.

Some of the advantages of immersion are: its effect in nearly always quickly relieving, and often in removing entirely, the severe pain attending phagedæna. Caustics are very rarely required. The ulcer is kept clean and free from discharge without pain or trouble. When a wound has to be made by the surgeon, its edges hardly ever become inoculated. The pain caused by frequent change of dressing is altogether avoided. The materials necessary for immersion being only those usually to be found in every house, it can be equally well carried out in private as in hospital practice.

In conclusion, I think it may be said that in the majority of cases of unhealthy ulceration and sloughing, whether local or syphilitic, immersion is the best and most speedy, as it is certainly the least painful, of the modes of treatment hitherto adopted.

Welbeck-street.

[7] All these were examples of the slowly-spreading non-inflammatory form of phagedæna. In none of the acute cases was there ever any relapse after the sore had once become healthy.

[8] A Treatise on Syphilis, p. 145.

[9] Med. Times and Gazette, loc. cit.

[10] American Journal of Syphilography and Dermatology, 1872, p. 308.

A NEW SUSPENSORY BANDAGE.

By CHAS. B. KEETLEY, F.R.C.S.,
ASSISTANT-SURGEON TO THE WEST LONDON HOSPITAL.

THE common suspensory bandage has these disadvantages: (1) if it is not fitted with a perineal band, the genital organs are pulled so far forwards as to cause an unsightly prominence beneath the trowsers; (2) if it has the ordinary perineal band, the anus gets chafed; (3) the tape in the hem round the margin of the bag chafes and cuts; (4) the perforations in the material of the bag are too fine for ventilation, consequently the bag becomes soaked with perspiration; (5) the hole for the penis is unnecessary, and only serves to let one testicle occasionally herniate through it.

The bandage I wish to bring under notice is contrived to obviate the above objections. A median perineal band holds the genitalia well back. An india-rubber ring in this band prevents it from chafing the anus, and the anus from soiling it. Another india-rubber ring takes the place of the piece of tape above referred to. The bag is hand-made, knitted, and very open in its network; and the penis is simply allowed to hang over the front of the bag. The contrivance has been freely tried in cases of gonorrhœa, orchitis, varicocele, relaxed condition of the genitalia attended by hypochondriasis, and in other affections of those parts, and found to answer perfectly.

Messrs. Arnold and Sons, of West Smithfield, make the appliance in three sizes, at the price of the old bandage.

UNIVERSITY COLLEGE, LONDON.—The Council of this College have awarded to Mr. H. F. Stokes, M.R.C.S., of Highbury (late house-surgeon of the hospital), the Atkinson-Morley Scholarship, of the value of £45 per annum, tenable for three years, for special proficiency in surgery.

STEEVENS'S HOSPITAL, DUBLIN.—At the close of the winter session the following prizes were awarded:—Gold medals: Senior class, John Neill; middle class, William J. Trotter; junior class, Samuel R. Wills. Honorary certificates: Messrs. Blackham, Cruice, Cuthbert, Dockrell, Lane, Lawless, and Wilson.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

SEAMEN'S HOSPITAL, GREENWICH.

CASES OF INJURY TO THE SKULL, WITH CEREBRAL SYMPTOMS.

(Under the care of Mr. DAVIES-COLLEY.)

THE following notes—for which we are indebted to Mr. Hugh P. Dunn, house-surgeon—may be advantageously read in conjunction with those published in the "Mirror" of the 10th inst. (pp. 663-665) from the Middlesex and the London Hospitals.

CASE 1. *Compound comminuted fracture of the skull; removal of bone; recovery.*—H. M——, an American sailor, aged thirty-six, was admitted on June 7th, 1876. In October, 1875, he had been stabbed by the mate of his ship with some sharp weapon upon his right temple. For three or four hours he lay insensible, but after a day and a night's rest, he was able to do his work, but with some difficulty, as he suffered from giddiness and headache. In January, 1876, he came to land, and was taken into the Singapore Hospital. Ever since the injury he had had a discharging wound. Three pieces of bone were removed from his temple in the hospital without chloroform. He had "fever" after the operation, but was never insensible. In April he left for London. On the voyage another piece of bone was taken out under chloroform. The wound never healed.

Upon admission, he was found to have a circular swelling, about two inches and a half in diameter, and elevated two-thirds of an inch in the centre above his right zygoma. It was in parts firm as if new bone had been thrown out. A small sinus discharging thick pus opened near its upper margin, and a probe introduced through this in a downward and inward direction came upon bare bone at an inch from the surface. He could open his mouth well. His general condition was rather feeble, and he suffered from dysenteric diarrhœa, from which, however, he soon recovered.

On June 29th chloroform was administered, and the bone exposed by a crucial incision, which divided the temporal artery. Three pieces of dead bone were removed from a cavity, which was more than an inch beneath the surface. The spray and other antiseptic precautions were used. In the same evening he had a rigor, and his temperature rose above 102°; it remained afterwards always below 100°. The wound soon contracted to a small sinus.

On Sept. 10th, as some more bare bone could be felt through this sinus, ether was administered, and three other small pieces of bone were taken out. Altogether, in the two operations, a portion of the squamous part of the temporal bone, rather larger than a half-crown, was removed in small necrosed fragments. The wound then healed up entirely, and he went out quite well a month later.

Remarks.—It would appear that this patient had suffered from that most dangerous of head injuries, fracture of the skull produced by a sharp instrument. Moreover, the bone had been broken at a point which is covered by the thick fleshy mass of the temporal muscle, so that there must always have been considerable opposition to the escape of pus and necrosed bone. It is interesting, therefore, to place his complete recovery on record, when we remember, further, that within two days of receiving the injury he was at work again under a hot sun, and with the ordinary diet of a sailor.

CASE 2. *Compound comminuted fracture of skull, followed by insanity.*—J. A——, aged forty, a carpenter, was admitted Feb. 7th, 1877. While he was working upon a ladder it slipped, and he fell twenty feet head foremost to the ground.

On admission he was quite sensible, and had been very sick. A lacerated wound extended from the middle of the right eyebrow downwards and inwards to the middle of the bridge of the nose, and also for two inches horizontally outwards. The right nasal bone was smashed in; the external angular process of the frontal bone, the malar bone, and probably a portion of the squamous plate of the temporal bone, were comminuted; the right eyeball had escaped injury, and he could see well with it. Ice was applied to the head, and he was confined to a milk diet. No pieces of bone were removed from the wound. But little pyrexia followed the injury. The temperature remained for a few days about 101°, rose once a little above 102°, and on the sixth day fell below 100°, where it remained for nearly three weeks. He was rather restless at night, and by day complained of severe headache. The wound soon became very foul, and was syringed out with carbolic lotion several times a day, while boracic-acid lint was applied in the intervals.

Seven days after the accident it was noticed that he could not move the left leg or arm. Later in the day Mr. Davies-Colley saw him, and found that the paralysis had gone, but that he moved the arm and leg much more sluggishly than those of the opposite side. About this time also the left pupil was found to be dilated. Six days later hæmorrhage came on in small quantities from the wound, which was filled with decomposing blood-clot.

On the fifteenth day after the accident he was placed under ether. The wound was enlarged, the temporal artery having to be divided and tied in doing so. Five loose pieces of bone were removed. The blood welled up from the interior of the skull, and had to be stopped by the insertion of a sponge soaked in carbolic lotion. The sponge was kept in two days, and no bleeding recurred. While it was in, there was a little bleeding from the right ear. He was now allowed to take bread, and soon after fish diet. The wound rapidly improved in appearance and contracted, and it was completely healed in ten or eleven weeks from the injury. He always, however, complained of pain in the right side of his head, especially of throbbing in the right occipital region.

Four weeks after the injury he began to have delusions. Then he would not take beef-tea, because "there was arsenic in it." He was very angry with his wife when she came to see him, accusing her of being unfaithful to him. The sluggishness of movement of the left arm and leg had become much less before this time, and was not subsequently noticed.

At the last examination of him, eleven weeks after the injury, the wound was quite well. From the middle of the right superciliary ridge to just in front of the ear, the level of the bone was depressed at least half an inch. The external angular process, the malar bone, and the greater part of the zygoma had disappeared. He could see well with the right eye, but could only open it about a quarter of an inch. The ridge of the nose was considerably depressed. He still complained of severe headache. His answers were quite rational, but the sister of the ward stated that he was still under the same delusions. There were no signs of paralysis. He had subsequently to be placed in a lunatic asylum.

Remarks.—From the nature and position of the injury, there can be little or no doubt that the symptoms observed in this patient were due to lesion of the right frontal lobe. It would appear, therefore, that no motor or sensory paralysis remained as the permanent result of the injury to this portion of the brain-substance. On the other hand, the intellectual faculties were so disturbed that he developed an intractable form of insanity. The case affords an additional confirmation of the conclusions which Dr. Ferrier has deduced with respect to the functions of the frontal lobe.

CASE 3. *Injury to skull; epilepsy; mania; trephining.*—H. R——, a German sailor, aged thirty-four, was admitted Jan. 30th, 1878. Nine months before he fell from aloft on his head. He stated that he was not bad until he got to Madras four months later. After remaining a month in the hospital there, he was transferred to a homeward-bound ship. The surgeon of the ship reported that he had been more than a month in Madras Hospital with fits caused by a fall on the head; that while he was under observation the fits were very severe, and that during or after them an attack of acute mania used to come on, requiring a strait-jacket and several men to hold him. He was also delirious at times, and anxious to commit suicide. Once he nearly succeeded in leaping overboard.

On admission he was found to have a depression of the bone and a cicatrix above the left side of the forehead, near to the coronal suture. He felt some pain there upon heavy pressure. He had fits every day; sometimes four or five

in one night. At times he was quite maniacal and very violent. Bromide of potassium was given, and then perchloride of mercury in $\frac{1}{12}$ grain doses.

As no benefit ensued, on Feb. 14th ether was administered, and a large circle of bone removed by the trephine where the cicatrix and depression existed. Nothing abnormal was found, except a rather firmer adhesion than usual of the dura mater to the bone, and a small projection upon the surface of the membrane which looked like a Pacchionian body. He went on well, and had no fits until the evening of the 18th. On the 25th he was said to be much better and brighter, and the next day he was allowed to get up for the first time since the operation. As the wound got better the fits came on again and became more frequent.

He had experienced so much relief from the trephining that he was very anxious that a similar operation should be performed on the other side of his head. This request was not acceded to, but a large seton was put in the back of the neck on March 27th. On April 22nd he was reported to have had no fits for a week. He slept well, was no longer excitable, and was able to do light work about the hospital. His general health had also improved considerably. The seton was still in his neck, and the wound discharging freely.

Remarks.—As the man could give but an imperfect account of the accident and subsequent symptoms, the diagnosis of the original lesion must be somewhat uncertain. He seems, however, to have had a compound fracture of the left side of the frontal bone, near the coronal suture. Cicatrisation was followed by epilepsy and occasional attacks of mania. These symptoms could not be mitigated by bromide of potassium or the other drugs administered. They were for a short time relieved by trephining, but the greatest benefit he received was from the application of a seton.

QUEEN'S HOSPITAL, BIRMINGHAM.

CASE OF PERI-UTERINE HÆMATOCELE; METRORRHAGIA; MELÆNA; CURE.

(Under the care of Mr. JOHN CLAY.)

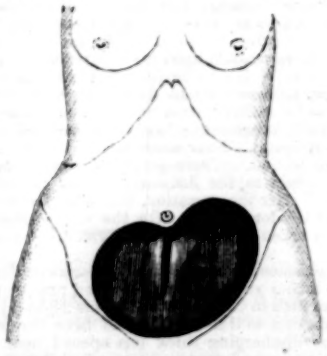
FOR the following notes we are indebted to Mr. J. W. Moore, obstetric assistant.

Anne M——, aged forty-three, married nine years, never pregnant, was admitted on Oct. 3rd, 1878, suffering from metrorrhagia. She gave the following history. Had been regular with moderate discharges until one year and ten months ago, when she menstruated profusely, each period lasting about fourteen days. Ten months later the vaginal hæmorrhage became constant, and continued up to the time of admission. The patient stated that about that time she first noticed a swelling in the abdomen, which continued gradually to increase in size; but she could not account for it in any way. Family history good.

On admission she was very anæmic and excitable, her mental faculties being also somewhat impaired. Temperature normal; pulse 75. On examining the abdomen there was a large, hard, resisting tumour filling the lower part, and extending to about two inches above the umbilicus. In the median line a distinct sulcus could be felt for a few inches, as shown in the annexed diagram, which also delineates the extent of the tumour. There was dulness on percussion, and tenderness on pressure in each iliac region. The abdomen measured 37½ in. in circumference at the umbilicus, and 38 in. three inches below that point. A vaginal examination showed that the os was patulous, and pushed forwards close to the pubes. There was a large elastic swelling behind the uterus, which seemed to be continuous with that in the abdomen. Fluctuation was not perceptible, and the uterus was normal in size.

On Oct. 5th the tumour was aspirated on the left side through the abdomen, and was thought to be solid, as only a few drops of blood flowed through the tube. The patient was very excitable and restless at the time, and objected to a puncture per vaginam or further manual examination. Ordered to keep her bed, and to have four grains of ergotine injected subcutaneously once a day. The injection was continued until Oct. 12th, when the metrorrhagia had entirely ceased. Two days afterwards the patient became very restless, and complained of pain in the left iliac fossa; this was followed by sickness and dysuria, with a temperature of 102° and pulse of 100. Ordered a saline mixture, with three drops of dilute hydrocyanic acid and ten drops of solution of morphia, every four hours. The catheter to be used thrice daily.

On Oct. 20th the abdominal measurements over the tumour were the same as on admission. The sickness and pain were relieved, but the catheter was still required daily. There was also a greater difficulty in introducing the finger into the vagina, but no fluctuation was discoverable. In the evening the patient had a strong desire to relieve the bowels, and passed 61½ fluid ounces of a dark blood-like fluid. Had complained of infra-pubic pain prior to this, but now felt relieved. There was no collapse. One hour afterwards she passed per rectum 66 oz. of fluid, resembling that previously passed, and containing a few scybalous masses. The vagina was examined, but no trace of blood could be found. The fluid had a sp. gr. of 1030, contained albumen, and under microscope showed blood-cells, some being broken down, and granular matter, but cholesterine could not be detected. The tumour had now nearly disappeared, being 2⅞ in. less at umbilicus and 3½ in. smaller three inches below that point. Resonance was substituted for previous dulness. The vagina seemed more capacious, and the finger could be passed more readily. The rectum was largely dilated. The woman was still unable to pass her water. Temperature 99°; pulse 100.



Oct. 21st.—Bowels freely moved. At 10.45 A.M. passed per rectum 26 oz. of fluid similar in colour and composition to that passed on the first occasion mentioned. Prominence of tumour entirely gone. The os uteri was in its normal position, and a soft, fluctuating tumour could be felt below the uterus. At 7 P.M. and 10 P.M. she passed 19 oz. and 18 oz. of bloody fluid respectively, the patient's pulse, temperature, and physical condition being unaffected as on other occasions.

On the 23rd the patient passed at 6 P.M. 20 oz. of fluid, and at 7 o'clock next morning she passed 10 oz. of blood-like fluid per rectum—thus making a total of 220½ oz. She now measured 3½ in. less at umbilicus, and 3½ in. less three inches below that spot.

On the 28th the bowels were freely opened; no blood was passed; she felt quite well; all trace of tumour gone.

From this time the woman steadily improved, and was discharged cured on Nov. 12th. She afterwards reported herself in the out-patient department. There was no trace of the tumour to be felt, and beyond some anæmia she was quite well.

SOUTH LONDON MEDICAL AID INSTITUTE.—The following is a list of the medical officers of this institution, which has been recently formed under the patronage of his Grace the Archbishop of Canterbury:—Consulting Physicians: Thomas Stretch Dowse, M.D.; Francis de Havilland Hall, M.D.; Robert James Lee, M.D.; and Reginald Edward Thompson, M.D. Hon. Consulting Surgeon: Sir Henry Thompson, F.R.C.S. Eng. Consulting Surgeons: Wyndham Cottle, F.R.C.S. Eng.; James Keene, F.R.C.S. Eng.; Henry Percy Potter, F.R.C.S. Eng.; and William Spencer Watson, F.R.C.S. Eng. Hon. Consulting Physician-Accoucheur: Alfred Meadows, M.D. Attending Medical Officers: Edmund O. Day, M.R.C.S. Eng., and John D. Roberts, M.R.C.S. Eng. Dentist: Thomas F. Pedley, M.R.C.S. Eng. and L.D.S. All the medical officers are on the Committee of Management, *ex officio*.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

MEMBRANOUS CROUP AND DIPHTHERIA.

(Concluded from p. 703.)

Dr. PAVY said that much confusion existed between the meanings of the terms "croup" and "diphtheria." By "croup" a symptom was described; by "diphtheria" an anatomical condition. Croup, however, might be associated with membrane or not. He would, then, temporarily discard these terms, and describe two classes of cases showing how integrally different they were. In one class of cases—he would call it Class A,—which may occur in children, but frequently in adults, there is a membranous exudation chiefly on the fauces and pharynx, extending to the mouth and nose, perhaps to the œsophagus and air-passages. Nor was the formation of membrane limited to these regions. If there be a wound in the skin or an excoriated surface, it would probably become covered with membranous exudation; and on account of this liability to the occurrence of this membrane it was a maxim in practice not to use a blister to the skin in such a case; for it was thought that the larger the surface covered by the exudation the greater the amount of blood-poisoning. In these cases the submaxillary and lymphatic glands were enlarged, a point upon which he had been led to lay great stress. It was one of the main or primary features, and was often as much marked as the swelling in mumps. In a large number of cases the urine was albuminous, and contained tube-casts, the condition which is noticeable in septicæmia or pyæmia, and indicative of blood-poisoning. Further, in this class of cases paralytic sequelæ occurred, not only local in connexion with the throat condition, but involving the upper and lower extremities. Then this class of cases was highly infectious. Striking evidence of this had lately been afforded at Guy's Hospital, where a nurse and a patient contracted the disease from a child admitted with it. In another case a patient took it from a case in a neighbouring bed and died. The other class he would style Class X, for it was to be placed at some distance from Class A. Hospital experience constantly brought under notice children of one, two, or three years of age suffering from croup. It was true that in many cases no proof of membranous exudation was present, but in some cases it was. In this class no diphtheritic exudation is met with elsewhere. There is no fear about the results of applying blisters. There is no glandular enlargement. An experienced sister in the clinical ward at Guy's Hospital informed him that she had never known such a case marked by glandular swellings, and this quite accorded with his own experience. Albuminuria was not a marked feature; when present it could easily be explained by the semi-asphyxiated condition of the patient. Paralytic symptoms were absent. At Guy's Hospital these cases are not regarded as infectious; isolation is not thought necessary for them as it is for those of Class A, nor had it been known to extend to other children in the ward. Regarding the matter in this light, Dr. Pavy thought that there are here two distinct diseases. He could not see why membranous inflammation should not be caused differently in different cases, sometimes due to traumatic causes, sometimes to internal conditions, and sometimes to a definite poison—diphtheria. Referring to Mr. Hutchinson's argument that a diphtheritic membrane was invariably the result of a simple inflammation, he thought that were this view acted on a serious extension of the disease would be promoted. For he believed that we are as helpless in the face of malignant diphtheria as we are in dealing with severe cholera, but by the proper use of disinfectants and by isolation we may prevent its spread. He urged in the strongest way that we ought to look upon diphtheria as a specific disease and a disease extremely infectious, requiring strong measures for the prevention of its spread.

Dr. FITZPATRICK said that his only claim to share in the debate was that he had contributed a case to the report which strikingly illustrated some of the points that had been raised. He was more strongly impelled to this since the Committee had presented the case in an entirely different sense from that in which he had viewed it (p. 49 of report). The case was that of a child, aged two years and a half, living in one of the squares near Hyde-park. It was sleeping in the cold weather in a large nursery without a fire, and with a northern aspect, and in the course of the night it awoke complaining of its throat, and with a hoarse voice. In the morning he was sent for to see the case—the message stating that the child had been seized with croup. The breathing became more difficult, and before midnight tracheotomy had to be performed. The child survived four days, and during that time false membranes were withdrawn from the trachea, and a large quantity of albumen appeared in the urine. At the time it appeared that this was a pure case of croup, due to exposure to cold. But, on inquiry, there seemed no doubt that the primary cause was drinking-water impregnated with sewer-gas, for the family had only recently come to the house, and the cistern supplying the water which the child drank was found to communicate by its waste-pipe with the soil-pipe of the closet. This case lent support to the view advanced by Dr. Johnson—namely, that exposure to cold, which ordinarily would give rise to simple catarrh, led, under unhealthy influences, to the formation of diphtheritic membrane on the inflamed surface. Sir William Jenner had compared the differences of opinion as to the conclusions in the report to the dispute about Hamlet's sanity. Without at all presuming to underrate the labours of the Committee, he was reminded, after carefully perusing it, of an anecdote in "Luther's Table Talk." He there relates a story of a lazy monk who, suffering from a constitutional indisposition to repeat his prayers, used to repeat the letters of the alphabet, and add, "Take these letters, O Lord, and put them together even as Thou wilt." The report was very valuable, but in it the profession was virtually told to put the facts together and draw their own conclusions. The net result of the inquiry appeared to be this. Much labour and careful investigation had been expended to find some line of demarcation between croup and diphtheria, and there was no indication of such a line having been found. The conclusion was obvious, that having failed to find any distinction, no distinction exists. If he dissented at all, it would be with the tenderness with which the term "croup" was handled. It was a barbarous, antiquated, and non-scientific term, and he would point out to Dr. Wilks that cases might be miscalled croup, as in the statement made by Dr. Long Fox on page 53 (a statement which the Committee think must be inadvertent), that "when my children were younger, the imperfect drying of a washed night-nursery floor has on several occasions seemed the origin of croup."

Dr. MATTHEWS DUNCAN said that in several parts of the report—notably on p. 43—it seemed to be assumed that diphtheria occurred in an epidemic form. Of this there was not a particle of evidence, and it was probably as erroneous as the statements (now fully disproved) that erysipelas or puerperal fever occurred in epidemics. The settlement of the question whether this disease were epidemic or not would lead to the settlement of the question before the Society, for it could then be shown whether a simple inflammatory croup existed apart from contagion or epidemic influence. The Registrar-General's reports might afford material for such an inquiry, but at present he submitted that the assumption of an epidemic character for diphtheria was unfounded in fact.

Dr. THORNE THORNE said that in several outbreaks of diphtheria he had investigated he had found that the deaths early in the epidemic were recorded as due to membranous "croup," and the later to diphtheria. The same fact had been noted in many reports by medical officers of health. It might be that the cases first observed in epidemics were recorded as cases of croup, but that when, from the spread of the disease, its real nature was made manifest, then all subsequent deaths would be recorded as due to diphtheria. As the report of the Committee dealt with the etiological side of the question, Dr. Thorne thought this point worthy of notice. He had had to inquire into epidemics of diphtheria in isolated districts, and generally found that the declared disease was preceded by attacks of a throat affection not obviously diphtheritic. At first it was often observed that over a large zone extending over many miles cases of sore-throat prevailed; that within that zone, at a later period, groups of cases clearly infectious occurred, in some of them with

patches of faucial exudation, in some with laryngeal symptoms; and, finally, within only one village genuine diphtheria broke out. So that it seemed as if in the progress of a long epidemic of throat affection this developed into true diphtheria. Whenever he had met with membranous croup in such epidemics there had also been slighter cases before the marked ones occurred, these earlier cases being apparently less infectious than the later ones; and some time elapsed before infection was detected. It might be that the membrane formed in the larynx in cases before the stage of infection was reached. It seemed that in diphtheria we have a disease which has a history passing from one extreme, that of sore-throat, to the other extreme, that of genuine diphtheria. Is it not possible that membranous croup occupies a stage in this pedigree short of true diphtheria? If it be so, then surely the two affections own a common origin. He believed that in diphtheria we have a disease the specific poison of which has not yet acquired that stability to which other specific diseases—e.g., small-pox—had attained; and that it depends upon sanitary legislation whether the poison of diphtheria ever is allowed to become so stable as these disorders. He was aware that this opinion was one-sided; but his experience was one-sided also, for it related only to the investigation of epidemics of diphtheria.

Dr. ANDREW confessed himself a dualist; nor was his opinion altered either by the report or the debate. His own experience confirmed that which he had been taught, that cases of membranous croup could, and did, occur idiopathically. He could not put himself in the position of the modern scientific athlete who commenced by stripping off every vestige of old doctrine, for he had lived in the pre-scientific period, and consequently had read the report in the hope of finding support to his pre-conceived opinions. Even if the report did condemn the dualist position, it was yet clear that it embraced the views of at least three parties—the dualists, the unicists, and those who were neutrals, who held that the doctrine of unity was "not proven." He agreed that the answer given in the conclusions to what was stated to be the scope and object of the inquiry tells nothing logically; but read with its context it was clear that the now famous sentence meant that membranous laryngitis may or may not be due to the diphtheritic poison. In looking through the body of the report he had found that the Committee took up the various points of distinction between the two diseases, minimising some, yet admitting slight differences, the balance of all taken together being in favour of the distinction. He had looked to the end to see whether, when such minor points came to be added together, a clear case for dualism had not been made out. For example, when the one point of the relative prevalence of croup and diphtheria at different periods of the year was inquired into it would be found that the purely laryngeal cases in the first six months of the year numbered thirty-one, in the last six months eighteen; whereas of laryngeal and faucial combined there were forty-five in the first six months, and fifty-six in the last. On page 73 in the report it is said that "it is quite hopeless to search the writings of Bretonneau for any distinction between 'pseudo-membranous croup' and 'laryngo-tracheal diphtheria,' for he evidently regards them as identical, and expresses himself repeatedly to that effect." But at the end of his second memoir in the Sydenham Society's translation Bretonneau distinctly says that he has met with sporadic cases of croup—a statement endorsed by Guersant and Bouchut. Dr. Andrew concluded by remarking that the membrane cast from the trachea from the eau-de-Cologne case contained layers which did not appear in the diphtheritic membrane *in situ*, showing clearly that in this case the membrane could not be due to diphtheria, as suggested by Dr. Johnson, for in that case it should have been wanting in constituents rather than possess additional ones.

Dr. HILTON FAGGE, as one of the Committee, stated that the report was an attempt to combine different views, and he confessed he was in a minority in his view of the subject. It would have been better had the Committee issued a double report, setting forth the arguments on each side. At the same time Dr. Andrew was right in saying that the conclusion arrived at was that other causes besides diphtheria give rise to membranous laryngitis. If the specific origin of diphtheria were abandoned, as Mr. Hutchinson and Dr. Wilks urged, it would, as Dr. Wilks said, end the question, for it would take away the backbone of the matter. Still, if it were ever so generally allowed that diphtheria was not a specific disease, there would still remain the question whether membranous croup was more allied to non-membranous croup than to pharyngeal "diphtheria." There was no distinction anatomically between the membrane in diphtheria and croup. (It is true that Oertel says that bacteria always occur in the diphtheritic membrane, but not in the membrane produced by inhalation of ammonia.) But the membrane differs in character in different sites, due, no doubt, to the anatomical differences in the mucous membrane. In almost every case, if the membrane extend far down the air-passages, it shades away into pus or muco-pus. Pathology abounds in other examples of a like kind. He admitted that Sir Wm. Jenner had found a weak point in his table of cases where contagion was thought to be absent, but the point he wished to bring out was the existence of a large proportion of cases of membranous croup without contagion as compared with pharyngeal diphtheria. Nor could he admit the justice of Mr. Parker's criticism that the large number of cases following traumatism was due to hospital atmosphere, for each of these cases had been infected by others previously admitted into the wards. Sir W. Jenner's explanation of the rarity of contagion from membranous croup was feasible, but that did not explain why cases of diphtheria originating in hospital never assumed the characters of membranous croup. Then, on the other hand, there was no sharp line of distinction between cases of membranous and non-membranous croup. Stridulous laryngitis was known to English observers long before Bretonneau, whom Dr. Johnson seemed to imply was the first to recognise its existence. There was great discrepancy between writers as to this stridulous laryngitis. Trousseau only records three fatal cases of non-membranous croup (he only gives one in detail, and that not a typical case). Dr. Johnson's experience of two cases (the first cases of "croup" he saw) was exceptional. In Guy's Hospital fatal cases of this kind were very rare indeed. In the last edition of Sir T. Watson's work on Medicine the whole description of croup has been transferred, not to diphtheria, but to simple laryngitis, and yet Dr. Johnson says that it is a mistake to say that simple laryngitis is often fatal. It was quite possible that in different countries croup differs frequently, so that no strict comparison could be drawn between croup as it occurs in England with croup as met with on the Continent.

Dr. GREENFIELD said, that having been secretary to the Committee he felt it right to refer to some points which had arisen in the course of the debate, although at so late an hour he could not venture to weary the Society further by any discussion of the general question, or do more than reply very briefly to some objections. He thought that one outcome of the debate must be to show that the task before the Committee was one of no ordinary difficulty. They had been blamed by some for not arriving at absolute conclusions. But he ventured to think that if any eight of those gentlemen who had spoken in the debate had formed the Committee they would have had equal difficulty in arriving at absolute conclusions, or even in agreeing in any conclusion at all. The Committee had endeavoured to place clearly before the Society the facts which they had been able to gather, to point out the difficulties which beset the inquiry, and to draw only such conclusions as were deducible from the facts. The question they set themselves to solve was whether membranous laryngitis exists independently of diphtheria. More than one speaker had blamed them for not answering the question absolutely in the negative—that is, asserting that no membranous laryngitis exists apart from diphtheria. Now, not to mention that they had distinct evidence that membranous laryngitis did exist apart from diphtheria, he would ask whether it was reasonable to expect that any eight men would be found rash enough to assert a universal negative which they could not prove. It might be easy for Mr. Parker or one or two individuals to do so, but the Committee could not be expected to do it. The Committee were fully conscious of the defects in their work, and as their only desire was for truth they would not complain of any fair criticism or objection. But some of the supposed criticisms made by Mr. Parker were mere restatements of facts fully stated in the report, others were grounded on entire misapprehension of the terms employed, which he thought a careful reading of the report would have made quite clear. Some of these errors had already been pointed out by other speakers, and he briefly mentioned others. Passing next to some of the questions raised in the debate, Dr. Greenfield said that the Committee had endeavoured to get some information as to the production of false membranes in the air-passages by the injection of ammonia—

mentioned by Dr. Wilson Fox; and had made overtures to a distinguished pathologist, who was conducting experiments abroad, to obtain such membranes for examination and comparison. But this gentleman, whose name he was not at liberty to mention, had been unable to carry out his intentions, stating at the same time that he had made the experiment many times, and that the membrane was in no way comparable to that of ordinary membranous laryngitis. Moreover, the careful experiments of Heinrich Mayer (Arch. der Heilkunde, 1873), led Dr. Greenfield to believe that the case was not so simple as Dr. Fox's remarks would suggest. As to the cast of membrane ejected in Dr. Reid's case of eau de Cologne inhalation, it had been carefully examined and compared with specimens from numerous cases of membranous laryngitis, with the result that it was found not to be like any of them, and could therefore not be used as an illustration of ordinary idiopathic membranous laryngitis. For this reason also, and others which he mentioned, Dr. Johnson's suggestion that sewer-gas poisoning or diphtheria was the cause in that case might be discarded as altogether groundless. In the specimen referred to by Dr. Sansom of membrane from a case of idiopathic membranous croup, there was nothing to distinguish it, under the microscope, from coagulated muco-pus. Dr. Poore had also kindly allowed him to examine the membrane from the case he narrated, which was expectorated after exposure to cold wind, and he had no doubt from the examination that the membrane was hydatid. It precisely resembled that expectorated in a case of hydatid of the lung with very similar symptoms which he had recorded in the Trans. Clin. Soc. for 1877. Turning to the objections which had been made to the mode of inquiry, he said that it had been thought that the experience and observation of the Fellows of the Society would furnish sufficient information, and the first circular of queries was therefore issued. Some of the replies which had been given were of very great value, and although some thought they had laid too much stress upon them and others too little, they would have been wanting in due respect to the Fellows if they had not made use of them. Many points, however, were left untouched by those replies, and other means were needed to collect sufficient information. And, speaking as an individual, he must confess that it seemed to him that many of the replies were mere opinions, or as Sir W. Jenner had said, the expression of facts viewed through the medium of opinions. Even with the further facts they collected the Committee did not feel able to come to absolute conclusions. It had been said that they ought to have taken up the subject of paralytic sequelæ as a possible means of distinction between diphtheritic and non-diphtheritic cases. But not a single case of paralysis of any form following membranous laryngitis only had been reported to them. He ventured to think that too much stress had been laid on the question of paralysis. Even in ordinary pharyngeal diphtheria the occurrence of paralysis is very variable in different epidemics, and the statistics of its occurrence most divergent. The highest estimate from any large number of cases only gave one in twelve as the proportional frequency of all the forms, ocular, pharyngeal, and other rarer paralyses being taken together. Now the proportion of recoveries in cases of membranous laryngitis of all forms did not reach more than one in ten in statistics of any large number of cases. So that, roughly speaking, in only about one in one hundred and twenty cases of diphtheritic membranous laryngitis could this sequela be observed, so far as our present knowledge goes. And if of these we took only the cases in which no false membrane existed elsewhere than in the larynx, we should reduce the number to considerably less. It was therefore obvious that the paralytic sequelæ could be of no value in separating a certain class of cases until an enormous number of instances had been collected. But although the Committee could not arrive at more than somewhat indefinite conclusions, and state those they thought fairly deducible from the facts, without making dogmatic assertions, they hoped that great good might result from the further investigation of the many difficult and embarrassing points which they had mentioned. Many of these had been referred to in the valuable discussion elicited. The Committee had been quite conscious of them, but had not gone into them fully, as they were only side issues. Some, however, were mentioned. Thus the point referred to by Mr. Hutchinson, Dr. Thorne, and others, that of the specificity of diphtheria, was mentioned at the outset (page 4). They said: "One of the most important of these points is the anomalous position which diphtheria holds in the rank of zymotic diseases, and the difficulty of defining precisely what is and what is not diphtheria. It is at present an undecided question whether diphtheria is as distinct and definite a disease as scarlet fever or small-pox, or whether its poison is not readily generated under conditions of foul air and decomposing sewage. The position of diphtheria is even more undecided than that of enteric fever, and there is still stronger evidence that it may be originated *de novo* and produce cases which are contagious and give rise to epidemics." And that this was really at the root of some of the diverse opinions was shown by the remarks of Dr. Johnson and Dr. Wilks. He believed that the line of investigation introduced and carried out with such ability by Dr. Thorne Thorne would lead to a great modification of our views on the entire subject of diphtheria. The Committee had also pointed out the differences obtaining in the swellings of lymphatic glands in pharyngeal and laryngeal cases, and also the difficulty in ascertaining the presence of false membrane in the fauces in children. Dr. Greenfield concluded by saying that personally he felt that the question could not be absolutely settled with our present knowledge. He had examined microscopically the air-passages and false membrane from about twenty cases with the most various supposed etiology and general conditions, and had come to the conclusion that, whether we have regard to the membrane itself, the parts subjacent, or the presence or absence of micrococci, there is no certain line of demarcation to be drawn between any classes of cases from morbid anatomy alone. There seemed to him, however, to be a strong balance of clinical evidence in favour of the view that the large majority of cases met with in practice were due to one set of causes, which were also concerned in the production of diphtheria; but he held also to the view so well expressed by Dr. Wilks in his reply, that under rare conditions false membrane might be produced in the larynx by other causes.

Dr. DICKINSON, premising that he should say but a few words on account of the advanced period of the evening, and also because his position as chairman of the Committee was accidental, owing to the retirement from it of Dr. West, on his becoming President of the Society, said that the highest claim of the report to consideration was its having given rise to one of the most important debates which ever took place under the auspices of the Society. Several speakers appeared to be under the impression that the Committee had given no certain opinion about anything—had said much, but nothing to the purpose. He was greatly surprised to hear Dr. Wilks say that he thought the term "croup" a sufficient and satisfactory definition of a disease. Croup only names a group of symptoms, it does not define a disease. It includes two most different conditions—membranous and non-membranous laryngitis—the former being a disease of great fatality—viz., about 90 per cent. Dr. Gee's table from the books of the Hospital for Sick Children showed that of sixty-three children attacked with membranous inflammation of the larynx only three recovered. Ten per cent. of recoveries is about the average, and even of this small proportion there are few who survive save with the intervention of tracheotomy. But there was another class of cases, not always so readily distinguished from those of membranous disease, in which dyspnœa is often severe and protracted, often so much so as to suggest operative relief, but in which no membrane ever came to light, and which almost invariably ends in recovery; not quite invariably, for in a very large recorded experience a case is now and then to be found in which non-membranous croup has ended fatally. The Hospital for Sick Children provides one such case, Guy's Hospital gives three, Dr. Johnson mentioned two. Thus non-membranous croup is as remarkable for its favourable issue as membranous croup is for the reverse. That the one was not a lesser degree of the other seemed proved by several reasons. Many of the non-membranous cases are very severe, some are long-continued; so that it is not the mildness or shortness of the attack that makes the difference. Other distinctions are—that non-membranous croup attacks boys more than twice as often as girls; it is apt to occur in the same individual, while the membranous disorder is not; it is not attended with glandular swelling, though this distinction is not of great value, as glandular swelling is not necessarily present when the affection is membranous; and, lastly, with non-membranous croup the urine is seldom albuminous; with the membranous affection it is albuminous more often than

not. In eighteen non-membranous cases albuminuria occurred but twice, and in one of these it was uncertain. In membranous laryngitis there was albuminuria in two-thirds of the cases examined. Then non-membranous croup is often definitely traced to distinct exposure to cold; membranous croup seldom so, if ever. On the other hand, there is indubitable evidence that the membranous affection is often produced by infection by foul air or foul water, or some such cause. Coming now to membranous croup, Dr. Dickinson asked whether we have here an affection always the result of a specific poison, to be called diphtheria, or must we divide the class mainly into two, one diphtheritic and specific, the other due to common inflammation, to be called membranous croup? The evidence before us gives us no means of making any such division in the cases which ordinarily come before us. We must fully admit, however, that membranous laryngitis may come on in connexion with various other disorders—with scarlatina, measles, small-pox, and others,—and that it comes on also as a result of various accidental laryngeal irritations—boiling water or steam, a cut in the throat, a pea in the larynx, acids, eau de Cologne, and so on; but these cases, whether in connexion with the exanthemata or accidental irritants, are few and exceptional. Dr. Johnson has explained them by the chance concurrence of the diphtheritic influence with the fever or accident; but it seems improbable that two separate causes of the same result should thus exactly concur. Dr. Buchanan has calculated how often the various exanthematous diseases should fall together with diphtheria, supposing their concurrence to be a mere matter of chance. He shows that for one quarter of a year, for which he made the calculation, diphtheria fell with scarlatina about as often as chance would give independently of any pathological association. But the membranous affection fell with measles about twice too often to be thus explained. So far as these figures go, they are in favour of the view that certain conditions, apart from the special diphtheritic influence, may develop membrane in the air-passages. The probability is that these febrile and accidental irritants are able themselves to produce the membrane in question. The existence of cases due to these causes prevents our dogmatising too absolutely. If (continued Dr. Dickinson) we had dogmatised more, we should have been more distinct in our conclusion, and should have met more exactly the views of some members of the Society. But we thought it better not to dogmatise beyond the dogmatism of nature. But, putting aside such cases, no ground of distinction can be found in ordinary cases which would enable one to say that this is due to common inflammation, and that to diphtheria. Dr. Barclay says he calls it croup, and regards it as simply inflammatory, when the membrane is confined to the trachea (and larynx?). But the tables show instances in which the membrane has been so limited, and yet the disease has been clearly traced to infection, or poison conveyed by air or water. An escape of sewer-gas into one of the wards of the Hospital for Sick Children caused diarrhœa in some subjects, in one pharyngeal diphtheria, and in another laryngeal diphtheria, in which the membrane was limited, as far as could be ascertained, to below the epiglottis. Other examples of the same sort occur in the tables, and not only, as shown in such cases, may membranous inflammation of the larynx be produced by causes which set up pharyngeal diphtheria, but membranous inflammation, thus limited, may set up, by infection in another person, the pharyngeal disease, as in one instance given in the report. There is no warrant, so far as causation is concerned, to call some cases simply inflammatory, while others are diphtheritic. Among these cases are many which begin insidiously without ostensible cause, others in which drains, foul water, and insanitary surroundings are apparently responsible, but none in which cold can be otherwise than vaguely described as the cause. Nor can any distinction be made out by the help of albuminuria or by any other test they had been able to apply. The conclusion which he believed was fully warranted by the evidence before the Committee did not represent the belief with which he began, but he could not resist the evidence which the collected cases presented. To this conclusion there is a corollary. Seeing the difference of issue between non-membranous croup and laryngeal diphtheria, notwithstanding their frequent similarity in symptoms, it becomes of the highest importance, in every case of laryngeal inflammation, to ascertain as far as may be the presence or absence of membrane. If membrane is present and in the larynx, there is little hope but in tracheotomy, which therefore there is no reason to delay. But if membrane be not present the child will almost surely recover without operative intervention, notwithstanding that the symptoms may be severe, and even somewhat lasting. The operation in such a case can be but a needless, and possibly a fatal complication. Turning to Mr. Hutchinson's remarks, Dr. Dickinson said, that no doubt diphtheria is not so definite a disease as typhoid or scarlet fever, but it is communicable, and he did not see why it should not be called specific. It has near relations to other disorders, especially to one to which Mr. Hutchinson referred—follicular tonsillitis, or the spotted throat. This may arise from the contagion of diphtheria; besides which, it may accompany diphtheria in the same person, the tonsils being spotted, while perhaps there is continuous membrane elsewhere. Then there is curious evidence that diphtheria may be only one of several disorders engendered by one and the same cause. Of a group of persons who drank of a specially poisonous well, drainage going into it, two had obstinate diarrhœa, one erysipelas, one purulent ophthalmia, one pharyngeal and one laryngeal diphtheria. Dr. Dickinson concluded by thanking the Society in the name of the Committee for the most ample and indulgent consideration which had been given to their report.

The Society then adjourned.

CLINICAL SOCIETY OF LONDON.

Removal of Biliary Calculus from Gall Bladder.—Spondylitis Deformans.—Sutural junction of a Divided Ulnar Nerve.—Excision of Papilloma of Bladder.

THE ordinary meeting of this Society was held on the 9th inst., Dr. E. H. Greenhow, F.R.S., President, in the chair. Mr. Bryant read a case of "cholecystotomy"; Dr. Sturge one of "spondylitis deformans," an example of a very rare disease. Most interest, however, centred in Mr. Hulke's case of suture of the ulnar nerve after its division of some weeks. A case of removal of a villous growth of the bladder by Mr. Norton excited considerable discussion and criticism.

Mr. BRYANT read notes of a case in which a Biliary Calculus was removed by operation from the Gall Bladder, and a cure resulted. The patient, a single woman aged fifty-three, was admitted into Guy's Hospital in July, 1878, with two discharging sinuses of three years' standing, following an abscess, which had been previously forming for two years. At first the sinus was laid open, and pus alone escaped; but, subsequently, as bile flowed in quantities from the wound, an exploratory operation was performed, and at a depth of two inches a biliary calculus an inch long turned out of the gall-bladder. Everything went on well after the operation, and although bile continued to escape from the wound for about two weeks, the parts quite healed in about four months, and the patient left the hospital cured. Mr. Bryant brought the case before the Society as an encouragement to surgeons to apply their art in similar or allied cases, for he was well prepared to support the suggestion of Dr. Thudichum, made twenty years ago, "that gall-stones might be removed from the gall-bladder through the abdominal walls"; and he pointed out that under certain circumstances the operation was justifiable, when the sinuses by their presence were setting up inflammatory and suppurative changes about the gall-bladder, without any obstruction to the bile-ducts, as well as in that more serious class of cases in which the cystic or common bile-duct was obstructed, and dropsy of the gall-bladder, with jaundice, complicated the case, as shown by the cases of Dr. M. Sims and Mr. G. Brown.—Mr. HULKE said there could be no doubt as to the propriety of the operation. In the "Mémoires de Chirurgie" for 1706 was an interesting and exhaustive treatise upon these cases, in which the whole question of diagnosis was very carefully gone into, where a similar case to that of Mr. Bryant's was related, and where a clear and nice comparison was made between this operation for the removal of gall-stones and lithotomy.

Dr. ALLEN STURGE read notes of a case of Spondylitis

Deformans. The patient, a man aged twenty-six, was an artificial flower maker, who had been under his care at the Royal Free Hospital. The mother suffered very much from rheumatism. One brother had severe chronic rheumatism, and another was said to be very subject to gout. The patient's health had been good before the present illness; there was no distinct history of syphilis. Prior to his illness he had been a strong, upright man, and a rapid runner. The present condition began eight years ago, with pain in the back, which had never since quite left him. Gradually the back became stiff, both in the cervical and dorsal regions. When he came under care the spinal column was remarkably fixed throughout. The lumbar and dorsal regions together formed a curve of large radius, with the convexity backwards (spinal lordosis); and the spine, as a whole, was on a plane posterior to that of the sacrum, producing a projection forwards of the abdomen, the legs being carried back in a corresponding degree to catch the centre of gravity of the body. There was no special tenderness of the spine at any part. In bending forwards, the spine, as a whole, remained quite stiff, and flexion appeared to be almost entirely confined to the lower two or three lumbar vertebræ. The cervical part of the spinal column was very stiff. Power of flexion of the head forwards and backwards was very limited, and lateral movement of the head was almost abolished. Power of rotation, though imperfect, was less impaired than the other movements. The thorax was very rigid; breathing was almost wholly abdominal. On drawing a deep breath there was a slight movement of expansion, but scarcely any of elevation. Dr. Sturge remarked that this condition was one of very rare occurrence, and would appear to be rheumatoid in its nature. The post-mortem changes were described a good many years ago by Professor R. W. Smith, of Dublin, and more recently by Dr. von Studen, of Altona. They were like those met with in rheumatoid arthritis of other parts of the body—viz., absorption of the articular cartilages, nodular growths on the articular surfaces of the bones and anchylosis of the adjacent vertebræ, to which must be added absorption of the intervertebral cartilage. It might coincide with rheumatoid affections elsewhere, but in many cases it was confined to the spine or to the spine and costo-sternal articulations. Todd had seen a case in a man aged twenty-five, and Eulenberg had met with it in a girl twelve years old. As a rule, however, bony anchylosis of the vertebræ occurred in old people; but it was doubtful whether the disease in young persons could be looked upon as identical with that which occurred in old people.—Mr. BRYANT referred to a case recorded by Dr. Fagge in the Pathological Transactions (vol. xxviii., p. 201), where there was general anchylosis of the vertebræ and of the costo-vertebral articulations. The patient died from fracture of the ribs. He had been subject to rheumatism. In reply to the President, he said that in that case there was only slight deformity. To Mr. Barker, he said there was actual synostosis.—Mr. HEATH said that fusion between some of the vertebræ was not so rare. Some anchylosed spines were found in the burying-ground which was excavated during the rebuilding of King's College Hospital; but such instances could hardly have led to the amount of deformity present in Dr. Sturge's case, where the curvature seemed to resemble that of angular curvature.

Mr. HULKE then read notes of a case of Sutural Junction of the Ulnar Nerve fifteen weeks after its complete severance by a roofing-slate; early restoration of function. He said the procedure was a rare one, but where practised had already given most satisfactory results, and held out promise of restoration to many an otherwise crippled limb. This case was interesting from the long interval that elapsed after the injury before the operation was performed, and from the speedy restoration of commencing nerve function, which was only three or four weeks after the operation. The patient, a blacksmith, aged fifty-three, was struck across the inner side and front of elbow by a slate dislodged from a roof. The wound thereby produced healed slowly, and was painful from the first, the pain assuming a neuralgic character. The forearm and arm wasted; the man's health suffered, and he was quite unable to do any work. Fifteen weeks afterwards all parts supplied by the ulnar nerve in the hand were numbed and cold, and the scar in front of the elbow was exquisitely tender. The patient was then chloroformed and an Esmarch's bandage put on. The ulnar nerve was exposed at the elbow, and found to be completely divided, and the two ends widely separated. The upper end was bulbous, and was dragged out of its course by the cicatrix; the lower end was shrivelled. In both ends were minute particles of slate embedded. Both ends were removed by clean transverse sections, and were then found to be three-quarters of an inch apart. In order to bring them together the upper end was stretched and drawn down, and joined as closely as possible to the lower one by four silk sutures passed through the sheath. Absolute contact was not obtainable. The operation was done, and the wound afterwards dressed antiseptically. The neuralgia ceased at once, and did not recur, and in less than six weeks the patient returned home. Sensation, which had begun to return about a month after the operation, rapidly increased, so that upon leaving the hospital the man went at once to his work.—Mr. MARSH said that two days ago Mr. Savory had operated on a similar case, where the ulnar nerve had been divided at the elbow, almost as in Mr. Hulke's case, but catgut sutures were used, and he did not think the upper end was stretched. Mr. Marsh also referred to Mr. Wheelhouse's case of suture of the sciatic nerve, where function was restored to a completely palsied limb. Such cases showed the great advances of surgery, for he remembered ten years ago, at the Children's Hospital, the case of a child whose lower limb was perfectly paralysed from a deep wound in the thigh, but where no operation was entertained.—Dr. GLOVER asked whether Mr. Hulke had brought the severed ends into contact.—Dr. ALTHAUS observed that the length of time which had elapsed from the date of injury showed what might be done by surgery. Physiological experiments had shown that if two ends of a severed nerve be approximated to within a quarter of an inch there would be perfect reunion; but if a longer interval were left then union only took place by fibrous tissue. In cases of simple division without excision of a part of the nerve union took place in from seven to ten days; if a small part were excised, union was delayed for two, three, or even four weeks. Hitherto a large number of cases of nerve-injury had been looked on as incurable.—Mr. HEATH asked Mr. Hulke whether observations upon the return of sensation were made specially on the ring finger; for it was stated that after division of a nerve there may be a reverse current by means of anastomotic filaments with neighbouring nerves—in this case the median. Some years ago, in laying open some sinuses about the elbow, he divided accidentally the ulnar nerve, but immediately united the ends by a single stitch put through the centre of the nerve. The suture was not seen again, and the patient recovered power, but not completely. At the time he had dreaded lest the presence of the thread in the nerve might produce tetanus. — Mr. G. BROWN said that Mr. Wheelhouse's case was remarkable because the operation was done so long after the injury—two years he thought,—and the separation between the divided ends was two inches. The man entered the Leeds Infirmary with the intention of having the limb amputated, it being a useless encumbrance. — Mr. MORRIS asked whether in Mr. Heath's case the presence of thread excited pain. — Mr. HEATH replied in the negative. — Mr. BRYANT asked how much of the nerve had been removed. He referred to cases recorded by Weir Mitchell where good results had been obtained from nerve-suture months or even years after division. — Mr. WALSHAM asked whether the little finger had a glossy appearance from loss of nutrition. This was very marked in Mr. Savory's case. In reply to Mr. Heath, he said that four sutures were applied in this case. — Mr. HULKE said that after operation the two ends were brought as close as they could be together, without being in absolute contact. As to the length of time elapsing between the injury and operation, he believed there were others on record, in addition to Mr. Wheelhouse's, which exceeded this. He had two or three times found nerves repaired after division—e. g., after operating for frontal tic. In one case he twice excised a portion of the frontal branch of the fifth nerve, and on each occasion the pain reappeared after a time. In another case, where he cut out nearly half an inch of nerve, sensitiveness recurred. In reply to Mr. Heath, he said that no observations were specially made to ascertain whether the median nerve had any share in the restoration of sensibility; but before the operation the ulnar side of the ring-finger was absolutely numb, and after the operation it regained its sensibility. At least three-quarters of an inch of nerve was removed. He could say nothing as to the condition of the skin on the fingers, and the man had not been to the hospital since he left it to resume his work.

Mr. A. T. NORTON read notes of a case of Papilloma of the Bladder; excision; death. A female, thirty-four years of age, was admitted into St. Mary's Hospital suffering from the effects of long-continued hæmorrhage from the bladder. The urine contained also much mucus and phosphates, small portions of phosphates being frequently passed. There was great pain after micturition, and constant desire to pass water. No calculus could be found, but the bladder was thick in the region of the trigone; and a digital examination per urethram under chloroform confirmed the diagnosis of a tumour of the bladder. The growth was one inch square, slightly raised, and coated with phosphatic deposit. Its removal was decided upon, the alternative to the patient lying between the risk of a severe operation and the continued pain, possible early fatal hæmorrhage, or blood-poisoning. It was impossible to remove the growth through the urethra, and it was decided to cut away the mass by opening the vagina. It was considered that the growth could not be removed without cutting through the urethra. The spring scissors were inserted, one blade into the bladder nearly up to the tumour, and the other into the vagina, and closed; the front wall of the vagina was then incised centrally to within half an inch of the uterus, and the vaginal wall was dissected from the bladder; the growth was then seized with the vulsellum forceps and drawn forwards, and was then excised by the scissors and removed. Bleeding was arrested by actual cautery, and the lateral flaps of the vagina approximated by sutures. To prevent further hæmorrhage a catheter was inserted, and the bladder compressed by plugging the vagina. No bleeding of importance took place. The temperature remained below normal, and the pulse rose to 120. Severe vomiting was persistent until the tenth day after the operation, notwithstanding subcutaneous injection of morphia and five-grain doses of quinine administered frequently by the stomach. After the tenth day she was considered out of danger, was making good progress, took food well, and was cheerful; but two days later, after vomiting, she fell asleep, and died in sleep from syncope. On post-mortem examination the heart was found to be healthy, its left side empty. The blood was mostly fluid. The wound was sloughing on the surface, some phosphatic deposit around it and the orifices of the ureters. Vesical mucous membrane congested, but of normal consistence. No peritonitis, and no thrombosis. Examination showed that so far as the peritoneum was concerned a tumour nearly twice the length and breadth could have been removed through the wound, but the ureters would be included in such an operation. Whether or not such inclusion of the ureters would add to the severity of the operation cannot be proved, but it is probable that the urine would escape without injury to the parts around. A microscopical examination showed the tumour to be a papilloma. Since writing the above case Mr. Norton said that he had operated upon a second case of tumour of the bladder, now in the hospital. This case had completely recovered from the effects of the operation.—Mr. HEATH asked if the growth extended beneath the mucous membrane; for if confined to the surface it might have been removed by scraping.—Mr. KNOWSLEY THORNTON had lately met with a similar case in which he advised operation, but the patient objected. She was an old lady, and had some symptoms of stone. Some large nucleated cells being found in the urine, he dilated the urethra, and found a soft mass projecting into the bladder above the left ureter. It was of the size of a half walnut, and examination of a small shred showed it to be a round-celled sarcoma. At the time he had thought of three methods of removal—viz., through the vagina, as Mr. Norton had done; or by a suprapubic operation; or by opening the bladder through the peritoneum. There would be no great risk in the third of these alternatives, provided the urine were not putrid.—Mr. MORRIS asked whether Mr. Norton had operated on account of the profuse bleeding or on account of the pain endured by the patient; and also whether, in the operation, he had removed the whole thickness of the wall of the bladder? A few years ago he had under his care, at the Middlesex Hospital (the case is recorded in the Med. and Chir. Transactions), a woman, forty-six years old, who had suffered from vesical hæmorrhage for eight or nine years, and for a few years from pain. A small papillary growth was found, and at first strong caustics were applied with temporary relief. Then he removed a large portion of the growth by the écraseur. Although the symptoms were relieved at the time, the patient died ultimately from hydronephrosis, set up by occlusion of the ureters by the growth.—Mr. HULKE asked why the urethra was slit up. He could quite understand that it might be necessary to open the bladder, but he did not see why it was needful to slit up the urethra. Then it appeared that the anterior wall of the bladder and of the vagina were divided, and that much and continuous vomiting followed these severe measures. It was true that after death the orifices of the ureters were found to be free, but then caustic was applied after the removal of the tumour, and the stitches in the wound would drag on the ureters, so that it was quite possible that they were for a time occluded.—Dr. GLOVER asked if any other organ was involved. He mentioned a case of vesical hæmorrhage, due to a growth in the bladder, which ended fatally very rapidly, and he urged that, before operating, the constitutional condition of the patient should be considered. None of the neighbouring organs were affected.—Mr. BAKER asked for particulars as to the size and nature of the growth in the second case mentioned by Mr. Norton.—Mr. BRYANT asked Mr. Norton why, after having confidence in dilatation of the urethra for the examination of the case, he had not the same confidence in it for operation. For localised growths could well be attacked through the dilated urethra. He had thus removed a sessile growth from the bladder by forceps and écraseur, and in two other cases he had found no difficulty. But he would hesitate long before proposing the severe measures described by Mr. Norton. He was not, however, prepared to say that in Mr. Norton's case the operation was not a justifiable one.—Mr. MARSH agreed with Mr. Bryant up to a certain point. What was the extent to which the urethra could be dilated without leading to incontinence of urine? Mr. Lane recommended that nothing larger than an acorn should be forced through the urethra. The operation of division of the vesico-vaginal septum was rather dangerous and formidable; but Mr. Marsh had seen it done, and had done it himself, for the removal of calculi. He agreed with Mr. Hulke as to the serious character of an operation in which the urethra was laid open in its whole length.—Mr. BRYANT added that by rapid dilatation almost anything might be done. Slow dilatation nearly always led to incontinence.—Mr. NORTON, in reply, said that the growth did not extend beneath the muscular coat. In operating he cut down into the vagina, peeled the vagina from the bladder, seized the bladder, and dragging it forwards, removed the growth by spring scissors. The danger of hæmorrhage, possibly leading to early death, determined him to perform the operation. He did not think that splitting the urethra added much to its gravity. The vomiting he attributed to the operation. Urine flowed freely. No other organs were examined after death. He did not think that the constitutional condition of the patient should be considered when she was dying from the disease; nor did he think he would have succeeded in removing the growth had he attacked it through the urethra.

The Society then adjourned.

Reviews and Notices of Books.

An Introduction to the Systematic Zoology and Morphology of Vertebrate Animals. By ALEXANDER MACALISTER, M.D. Dublin. pp. 365. Dublin: Hodges, Foster, and Figgis. London: Longmans.

THIS is a volume which is published under the auspices of the Provost and Senior Fellows of Trinity College, Dublin, who have defrayed the expenses connected with it, an act of liberality on their part which deserves recognition and gratitude. We have already had occasion to notice favourably a previous work by Dr. Macalister on the Invertebrata. The present volume is complementary to the former one, and is written in the same style—that is to say, it contains the main facts of the morphology of the vertebrate series expressed in about as few words as it can possibly be conveyed in. Being a collection of facts, it scarcely admits of criticism, except in regard to the order and mode in which the facts are placed together. We extract the introductory remarks to the description of amphibia, which

extends over sixteen pages, as an illustration of the style in which the whole subject is treated.

"CLASS 2. *Amphibia.*—Ichthyopsids, with neither fin-rays nor sternal ribs, seldom with an exoskeleton. The cuticle is thin, constantly renewed, like that of fishes, and beneath it is a layer of contractile (often branched), pigment-cells, and mucous glands, which may be clustered in the axilla or other places. The limbs, when present, consist of the same elements as in the higher vertebrates, and their girdles rarely consist for any large extent of membrane bones. The vertebral bodies are bony, the cervicals are 1-3. The notochord is often persistent, with meso-vertebral (not inter-vertebral) swellings. The skull has two ex-occipital bones, each bearing a condyle, for articulating with the first vertebra; an immovable suspensorium is attached to the fixed palato-pterygoid cartilage, which is attached to the periotic behind, and to the ethmoidal in front, and whose quadrate end is the most constantly ossified. There is no inter-orbital septum, and no ossified supra- nor basi-occipitals, basi-, pre-, nor ali-sphenoids, the pro-otic and the columella are constant, but the epi- and opisthotic may or may not exist. The ear capsule, which completely includes the labyrinth, has a fenestra ovalis, rarely a rotunda. Parasphenoid, double vomers, parietal, nasal, maxillary and premaxillary bones usually exist, and there is often a temporo-mastoid splint, T-shaped in anura, which represents the pre-operculum (squamosal). The proximal end of Meckel's cartilage never ossifies, the distal rarely. Amphibians have prehensile teeth (not masticatory), always in more rows than one. They have oral but no salivary glands. A short intestine with no spiral valve; a gall-bladder and no cæcum. The blood is cold, with large oval nucleated corpuscles. The heart has a rhythmically contractile sinus venosus, two auricles, one ventricle, and a bulbus aortæ, with striped muscles in its wall and an incomplete septum. There are never fewer than two aortic arches, and both reno- and hepato-portal veins exist. The larvæ breathe by gills, which may persist or vanish; but the adults have lungs."

Minor details are added in smaller print respecting the lymphatics, the nerves, and certain features relating to development. It will be seen that an immense amount of information is compressed into a few lines, rendering it invaluable to a lecturer on the subject, and for those who, having acquired a general knowledge of the facts of morphology, wish to tabulate and complete it. Bibliography is sparingly introduced; but we think it would add to the value of the work if to each chapter were given a short heading indicating the most important monographs to which the student could refer. There is a good index.

Handbook of the Practice of Medicine. By M. CHARTERIS, M.D., Professor of the Practice of Medicine, Anderson's College, Glasgow; Physician and Lecturer on Clinical Medicine, Glasgow Royal Infirmary. Second Edition. London: J. & A. Churchill. 1879.

WE had the pleasure to review the first edition of this little work only fourteen months ago, so that, whatever the size of the edition, or of the book, may be, it is pretty plain that the professional public, whether of the student or general practitioner class, appreciate the material that Dr. Charteris has offered them. We see no reason to alter the favourable remarks recorded in THE LANCET of Nov. 3rd, 1877, and sincerely wish for the book a long run. The plan for performing post-mortem examinations is a valuable addition, and affords an instance of the sort of work in which Britishers north of the Tweed always, somehow, beat their southern *confrères*. This is, however, wholesome rivalry, as to which no one need ever complain. Meanwhile, let the author (or perhaps we should say the publisher) look, as he ought, rather to the busy practitioner than the student to buy and read his book.

OUR LIBRARY TABLE.

The Journal of Physiology. Supplement to Vol I. Macmillan.—We desire to call attention to this very valuable part of Dr. Foster's *Journal of Physiology*. It is a list of the works and papers of physiological interest that have been published in the year 1878. Everyone engaged in physiological research has felt the value of Henle and Meissner's *Bericht*, the *Centralblatt*, and the French *Comptes Rendus*. The present publication aims at giving a complete list of such papers. About 1200 are here enumerated. Of course there are some omissions—for example, on one point alone (colour-blindness) we miss J. Michel, "Die Prüfung des Schvermögens und der Farbenblindheit"; Stilling, "Ueber Farbensinn und Farbenblindheit"; and Hohngren, "Die Farbenblindheit"; all published in 1878, on a most interesting subject. Nevertheless, the work is well worthy the attention of all who are engaged in original research, or who wish to see what has recently been accomplished in any special department. The part wants a table of contents showing the order in which the subjects are taken, and a list of the authors' names in alphabetical order.

On the Quantity and Quality of the Water supplied to London during 1878. Being the Annual Report submitted to the Society of Medical Officers of Health. By CHARLES MEYMOTT TIDY, M.B., F.C.S., Professor of Chemistry and of Medical Jurisprudence and Public Health at the London Hospital, &c. J. & A. Churchill. 1879.—Professor Tidy, who, it is well known, follows the late Dr. Letheby in his optimist view of the London water-supply, publishes from time to time his very full and careful analyses of the London waters. The report for 1878 calls for no special remark except that we are glad to observe the absence of the statement so often made, and so incomprehensible, that the quantity of organic matter in the London waters can be found by multiplying the oxygen indicated by eight. We entirely differ from the author's opinion of London water, thinking much of it very bad and liable to be dangerous, and must content ourselves with recognising the ability and industry of his work.

A Visit to the Court of Morocco. By ARTHUR LEARED, M.D. Oxon., F.R.C.P. 8vo, pp. 86. London: Sampson Low and Co. 1879.—In this work Dr. Leared gives an account of a journey made in 1877 in Northern Morocco, and during which he visited Mequnez, Fez, and Tetuan. The journey was made in the position of physician to an Embassy sent from Portugal to congratulate the Sultan on his accession to the throne. The work is to the full as interesting, although, as the brief statement we have made would imply, of a much less comprehensive character, than his previous work, "Morocco and the Moors." A graphic description is given of the events of the journey, and of the places visited; and this description has a peculiar interest, as the ground traversed in the interior was shortly after Dr. Leared's visit the scene in part of that terrible famine from which Morocco is still not quite free, and of that outbreak of fatal disease concurrently with the famine, which was reported in Europe as "cholera," but which is now understood to have been the fatal diarrhœa of starvation. This volume will form a supplement to Dr. Leared's previous work on "Morocco."

The Law relating to the Registration and Use of Canal-Boats as Dwellings. By J. B. HUTCHINS. London: Knight and Co.—This is a handy work adapted for the pocket, on the Canal-Boats Act of 1877, and on the regulations issued by the Local Government Board under that Act. After an excellent introduction, describing the circumstances from which originated the Act of 1877 and the general bearing of the Act, Mr. Hutchins gives, with notes, the regulations made by the Local Government Board under the Act; and these are followed by the explanatory circular issued by that Board to local authorities, and by the Act itself. An index closes the book—a volume which, we apprehend, will prove of the greatest utility to the officers of those local authorities who have to administer the Act.

THE LANCET.

LONDON: SATURDAY, MAY 24, 1879.

IT must be painful to many Scotch graduates to see the universities of Scotland posing at this crisis, under the auspices of Dr. LYON PLAYFAIR, as opponents of medical reform. We will yield to none in our respect for the work that has been done, and is being done, by the Scotch universities. Little more than a year ago we gave to our readers some account of that great work, as witnessed by ourselves, and it is some proof of the friendly character of that account to see it reproduced as an appendix to the "Statement on behalf of the Universities of Scotland, with reference to the Medical Acts Amendment Bills (1879)." We have been favoured with a copy of this statement. We rejoice at it on one account. It has long been apparent that the idea of a one-portal system, in the common acceptation of that term, was an offence to our Scotch friends, universities and corporations alike. But until lately the objection has not found very definite shape, except in the speeches of Scotch members of the General Medical Council. In the document before us, above referred to, we have the arguments against all Medical Bills set forth very fully and systematically. If we can refute those arguments, we shall make some contribution to a restoration of concord among those who ought at the present moment to help Parliament and the Government in an honest attempt to establish the examinations for licences to practise medicine on an equal and satisfactory footing in every part of the kingdom. If we fail to convince those who have drafted the statement, we may succeed in convincing Scotch graduates generally, and perhaps the members for Scotland, that the Scotch universities are being placed in an unworthy attitude of opposition to changes which are called for by public opinion, and which should have nothing but countenance and support from the Scotch universities as bodies which have their *raison d'être* in giving not mere common licences to practise, but degrees, which confer honour and distinction. At any rate, we shall hope to convince all unbiased persons who can view the question from any other point than that of supposed "interests," that no greater good can be done to medicine, and through it to the public, than by creating a high and equal *minimum* examination in each division of the kingdom, to be passed by all persons before entering the profession.

The statement, as a whole, is an appeal *ad misericordiam*. "The poor universities of Scotland have not, like the English corporations, local and personal influence at the seat of Government." Hence these contemplated changes, which threaten the whole scheme of their education. It will be generally found that when the opponents of a reasonable change indulge in a strong statement they contradict themselves; and we shall have little more to do in placing this "statement" before our readers, than to refute one of its parts by quoting another. In the very next sentence in which this want of influence of the Scotch universities is bemoaned so pitifully it is stated that an amendment, "in their interest," was brought forward by the Duke of BUCCLEUCH, seconded by the Marquis of LOTHIAN. Our memory may be faulty, but are we wrong in thinking that the Lord President is the Chancellor of the University of Aberdeen? The member for the University of Edinburgh—a reformer so able at baulking reform—was a member of the last Government, and will doubtless be a member of the next. Let us have no more of this pitiful cry of want of influence. It would be more true and dignified in the authors of this "statement" to admit that they want, not influence but arguments, and that they have failed to carry public opinion with them in their opposition to the changes called for alike by the public and the profession.

Supposing, then, that these poor uninfluential bodies, the Scotch universities, had had influence to state their case against all the Medical Bills, it would amount to this: First, that the "uniformity" proposed under the Bills, even if desirable, is unattainable by the scheme of three examining boards acting under examination rules framed by the General Medical Council. Secondly, that Medicine, as a progressive science and art, will not lend itself to stereotyped and conventional standards of examination, and that under a General Medical Council standards would become conventional and stereotyped. Thirdly, that no abuses in Scotch universities, and no defects in their system of teaching, are alleged which could justify a legislation which deprives them of their present power of licensing men to practise. Fourthly, that the authorities of Scotch universities are prepared to prove that the whole scheme of their education, as carefully matured and successfully in operation for many years past, will be endangered by the proposed legislation.

We will deal with the last argument first. For we are bold to say that if we thought the tendency of legislation were to damage or destroy the whole scheme of Scotch education, we should not be amongst its eager supporters. This scheme may not be perfect. It may be a little too "stereotyped." It may involve too much "lecturing." But the demand for it shown by the unprecedented number of students is the best proof that the Scotch universities do for Medicine what the English universities have completely failed to do, though Cambridge shows signs of great earnestness and efficiency in the matter. But we deny *in toto* that there is anything in the scheme for compelling a reduction in the number of licensing boards to effect the system of the Scotch universities. That system does not depend for its existence or success on the fact that the degrees of the universities of Scotland are licences to practise. The majority of Scotch medical students do not graduate, and the majority of Scotch graduates hold extra-academic and inferior qualifications. Thus out of a list of Edinburgh medical graduates which happens to lie before us, we have ascertained the qualifications possessed by 102, taken consecutively. Of the 102, six have no qualifications except one or other of the university degrees; 48 have one other extra-academic degree, and 48 have two others or more. The Scotch universities will be far less affected by the necessary legislation than the English College of Surgeons, which, in supporting a Conjoint Scheme, sets an example of

public spirit. But the Scotch universities say, if our degrees represent a higher amount of knowledge than that to be required under the Medical Act, why subject our graduates to the necessity and expense of passing an inferior examination? To which we must answer—with much sympathy and all respect for the universities—that all the bodies affected by the promised legislation might make a similar claim; and that our universities ought not to be tempted to grant degrees on easy terms, because, as a matter of experience, they have not always been able to resist the temptation; and when they have yielded great has been the scandal and the injury to higher education. The proposal of the Duke of BUCCLEUCH that the presence of examiners from the conjoint boards in the university examinations should give to these examinations a "qualifying" character is, we admit, not unreasonable or to be lightly dismissed. At the same time we think the universities of Scotland would best consult their own dignity and even interest, in accepting the one-portal system in principle, and, with it, the view that their degrees are meant to be, not diplomas, but distinctions. A high *minimum* standard of examination for a licence to practise will be an additional security for high standards in universities, and give an additional value to university degrees.

But it is said that uniformity is unattainable by three Boards, even if desirable—a suggestion that it is not desirable, as in examinations testing classical or mathematical knowledge. The disparagement of uniformity and equality of minimum examinations has been answered over and over again. It is as unreasonable to refuse to require uniformity of tests in regard to some parts of medicine as in regard to mathematics. The course of the femoral artery, the attachment of muscles, the composition of bile, and the nature and objects of the circulation, and suchlike facts, admit of statements almost as absolute, and require, for medical purposes, to be as accurately conceived of, as the sum of two and two. The solid basis of a good medical education is the knowledge of well-ascertained facts in anatomy, physiology, and pathology. And it is a certain minimum acquaintance with these that can and ought to be ascertained. The contention of the "statement" is, in effect, that men in London, Dublin, and Edinburgh may take different views of questions of fact. Reasonable diversities of opinion in regard to doubtful questions of medicine are provided for by special enactment.

But, according to the "statement," uniformity of examination cannot be obtained by the three Boards to be created under the Bill. One Board we admit—and in THE LANCET Bill we embodied the view—would be better, and we should very much like to see the one-portal system realised in this perfect form. The differentiation of merit in men would then be shown by their higher and their honorary degrees, while their fitness for duties of practice would be secured by the well-controlled minimum. But surely three Boards will admit of more complete supervision than nineteen, if the General Medical Council, in which all the divisions of the kingdom are represented, does its duty. If one division lagged behind the others, this would be ascertained by visitors, and the remaining two divisions would have an interest in the rectification of the inequality. Our space is exhausted, but we trust we have said enough to show that the opposition of the Scotch universities to medical reform is unworthy and baseless.

THE concluding meeting of the Pathological Society for this session was signalised by the presentation of the report of the Committee appointed to inquire into the Nature, Causes, and Prevention of the Infectious Diseases known as Pyæmia, Septicæmia, and Purulent Infection. This committee, consisting of Mr. MARCUS BECK, Dr. GREENFIELD, Mr. MACCARTHY, and Dr. RALFE, was formed in the spring of 1877, and was part of a larger committee formed by representatives of the London hospitals, the inquiry having been suggested to the Society as one fitting for it to undertake by Dr. MURCHISON in his inaugural presidential address. He had further stated that probably it would be possible to obtain a Government grant for carrying on the research, and it was mainly owing to his active intervention in the matter that a sum of £350 was placed at the disposal of the Society by the Government, it being understood that the report should be incorporated in the scientific reports of the Medical Officer of the Privy Council and Local Government Board, as well as published in the Society's Transactions. To Dr. MURCHISON, then, must be given the credit of having proposed the inquiry now concluded. It is known how great an interest he took in the prosecution of the labours of the Committee, and it adds to our sense of sorrow at his loss that he was no longer with us when the work he had looked forward to so keenly came to be presented.

The report in question was so elaborate and extensive that leave was willingly granted to the Secretary, Dr. RALFE, to read it only in abstract. The same reason must be our apology for confining these remarks to the leading features of the report. There will be time and opportunity for its adequate consideration some months hence, when the large amount of material has been published and placed in the hands of the Society. It may be said to have fallen under the three heads of etiology, semeiology, and pathology. In inquiring into the first of these subjects, the Committee collected statistics from ten large London hospitals during the past ten years, and from the facts thus gathered have drawn some interesting deductions as to the prevalence of pyæmia and septicæmia in relation to other diseases, to meteorological conditions, and other influences capable of being regarded as predisposing causes. Broadly distinguishing between septicæmia and pyæmia on the recognised ground of the absence in the one and presence in the other of metastatic suppuration, the Committee directed their attention to the subject of artificial septicæmia, with the endeavour to ascertain whether any cases of septic poisoning occurred in the human subject at all comparable to those rapidly fatal examples of blood-poisoning produced by the injection of septic fluids in animals, with which the lectures and experiments of Dr. SANDERSON have made us familiar. By a calculation confessedly only approximate the Committee believed that instances of this form of septicæma, which they term "septic intoxication," would require for its production the entrance of as much as two or three ounces of putrid serum into the blood at one time. For so large a dose to be absorbed, not only must there be opportunity for the accumulation of fetid dis-

charge, but there must be a large surface for its absorption. These two conditions obtained in the two cases of septic intoxication they report, and they suggest that had cases of rapid death after ovariotomy been included they would have had more instances of this, the most deadly form of septicæmia, owing to the large absorbing surface presented by the peritoneum. The morbid changes present in this form of septicæmia much resembled those in the more usual form, that known as septic infection without metastatic abscesses—fluidity of blood, subserous hæmorrhage, and softening of spleen being the chief of these. So far as could be gathered, the effects of ordinary septicæmia, that of infection from one patient to another, were the same as those produced by the rapid septic intoxication, only spread over a longer interval, but, as KOCH first showed, there is an integral difference between them. In all cases of septic infection organisms may be detected in the blood. Twenty-nine cases of septicæmia were detailed in the report, of which only two were instances of septic intoxication. There remained 127 cases of pyæmia, the ordinary significance of the word being used by the Committee, who, however, have succeeded in making no fewer than eight subdivisions of this form of blood-poisoning. These subdivisions are based mainly upon the relations of thrombosis and softening clots to secondary abscesses, and upon the situation of these abscesses (e.g., in some cases they were absent from the lungs, in others these organs alone contained them, and so on), whilst pyæmia due to acute necrosis and that due to ulcerative endocarditis each occupy a place apart. One very constant fact is striking—namely, the association of "arthritic pyæmia" with genito-urinary inflammation. This is of interest in connexion with gonorrhœal rheumatism, and possibly also with rheumatoid arthritis. Details of the examination of the blood and urine completed this section of the report. It is interesting that in nearly all of the eighteen cases of pyæmia and septicæmia in which the blood was examined, bacteria were found, but by no means in constant proportion nor in any constant uniformity of size and shape. The Committee could not then propound any theories from these observations. They have wisely contented themselves with stating the facts. They could not even trace relations between the different forms described. It does not appear that any "cultivation" of them was followed out. But with the facts before them, they were justified in believing that the presence of these organisms was rather evidence of the existence, than cause of the production, of the symptoms of blood-poisoning. Many considerations naturally arise here, but until the subject can be viewed in all its bearings, until the report is fully before us, it would be out of place to attempt anything like a criticism. The most interesting fact yielded by the analysis of the urine was the diminution in the excretion of inorganic constituents, chiefly earthy phosphates. It was suggested that this might be due to consumption of these constituents in the blood by these organisms. It was also pointed out that the potash salts were not in excess, as had been theoretically surmised might be the case.

The histological section of the report was admirably illustrated by the specimens exhibited on Tuesday evening. The same thoroughness which characterised the inquiry into the clinical and general pathological side of the question has been evinced in this part of the subject. In all of the cases not an organ or tissue of the body was left unexamined. The result was singularly uniform. Micrococci—the spherical form of organism which it may be remembered Mr. CHEYNE showed at the last meeting of the Society to be often so harmless—occurred in large numbers in all parts; they were contained within bloodvessels, blocking them almost or entirely; but, curiously enough, bacteria were only found in two cases, and in one of these their presence was probably due to decomposition. This is singular, because, as above stated, bacteria of the most varied forms had been found in the blood in many cases during life. Doubtless an explanation of this can be afforded; but the scientific world is as yet so unsettled as to the relations of these various forms of organisms—which border on the invisible—that it is well to be cautious in expressing opinions. By means of staining reagents the specimens shown by the Committee (we believe Dr. GREENFIELD and Mr. MACCARTHY had charge of this part of the report, and Mr. BECK and Dr. RALFE of the other part) demonstrated the presence of organisms in a striking manner. They also investigated the changes in the lining membrane of the bloodvessels, especially of the arteries and the composition of thrombi.

The question before the Committee was one of unusual difficulty, and great credit is due to them for having produced so voluminous and so exhaustive a report within the brief space of eighteen months. It will be found when it comes to be published to be the most complete survey of the subject of pyæmia and septicæmia in man that we possess, and it will prove valuable, quite as much for the suggestions it affords for further research as for the new light it has thrown upon the nature of these diseases. The work, carried on under the joint auspices of the Pathological Society and the Local Government Board, may, we trust, some day be again taken up under the same auspices, so that further research may be directed upon the numerous questions raised on all sides of this vast and important subject.

IN the legal profession in England there are three distinct and well defined branches of practice; and the boundary lines of the several spheres of enterprise may not be overstepped. The solicitor transacts ordinary business, and advises his client, both as to the avoidance and the redress of grievances. He asserts the rights of the layman who entrusts his interests to his keeping, and avenges the wrongs inflicted upon him by others, so far as these functions can be performed with the aid of the ordinary appliances which the law affords. When matters become more complicated than the simple remedies will suffice to cure, the solicitor seeks the aid of counsel. The client cannot go directly to the latter to the prejudice of the general practitioner at law; nor can counsel transact ordinary business for laymen, however willing they may be to pay his fees, or secure his services. An opinion may of course be obtained on the most trivial subject, but the case must be submitted through a solicitor, or counsel cannot entertain it, so that the wider professional interests are duly protected. There is a still more exclusive class of practitioners who act solely as consultees and leaders—the Queen's counsel—who are pro-

hibited from appearing in most cases before the courts without a junior. By this simple but effective organisation of labour, any unseemly conflict of aims and interest is prevented, and the public benefit, not less than the profession, by the arrangement made and carried out. Young men select the office or the bar as a career, and must adhere to the line of practice they have chosen. The result of this exclusiveness is that each of the two branches of the legal profession is developed to the highest degree independently, and yet in co-operation. There can be no encroachment, and the members of the several crafts respect each others interests. The barrister is always intent on a certain class of business. The solicitor practically studies all branches, and is the all-round lawyer, but he deems it no slight or injury that at a particular stage in an important case a member of the bar should be required to appear for, and act with him. The position of affairs would be altogether different if the client might choose at the outset whether he should select counsel or solicitor as his general adviser. It is not assumed that the barrister is better informed as a man of law than the solicitor; but he has selected a line of study and practice which gives him a different standpoint in the pursuit of his subject, and greater leisure for his reading and investigations than would be compatible with general business. It is the theory of his department in work that all the information and experience he acquires is at the disposal of the solicitor for the advantage of his client; but it is, all through, as the adviser and representative of the case entrusted to him by the general practitioner of law, the barrister acts, and any direct communication between the client and counsel is wisely prohibited. The inner circle of practitioners—the Queen's counsel—are promoted from the ranks of the outer bar, but when they accept the preferment of silk, many of them refuse to advise, except with some member of the bar who has not yet claimed the higher dignity. We repeat, this formal subdivision of labour is not less advantageous to the public than to the legal profession.

It would be well if the several branches of practice in our own profession were as sharply defined and as rigidly kept as those of the law and its professors. The solicitor answers to the general practitioner of medicine. The sphere of the family and personal adviser in disease is as wide and useful as that of the man of law who transacts ordinary business, but it is not so clearly bounded; and when a certain reputation has been achieved, there is nothing to prevent the general practitioner from acting as a consultee. The fact that medicine has no formal area corresponding to the courts of law—unless the hospitals may be regarded in this light—has left us without a boundary line. It is loosely assumed that as the experience acquired in general practice must be valuable, the man who has laboured long and honourably in general medicine does wisely to set up as a consultee. If this reasoning were admitted as the basis of procedure in law, leading counsel would be experienced and successful solicitors; but it is not admitted, and the consequence is that to the end of the chapter, the ripening skill of the general practitioner is available for the direct benefit of his lay clients, while the fact that it must be so acts as an incentive to young men embarking in business to lay themselves out for diligently working up and securing a connexion. Except in so far as local needs and customs may in certain cases—particularly in the provinces—give permanence to a medical *clientèle*, family practice, in the old-fashioned sense of the phrase, has become a thing of the past, and it cannot be questioned that after every allowance is made for the increased facilities for change which recent times have created, much of the mobility which comes to characterise a medical connexion is directly due to the growing custom of repairing habitually for every ache or malady to the consultee. We cannot help thinking the disadvantages of this practice are unrecognised by the public. Much, if not all, that accrued to the knowledge of constitution and hereditary proclivities has been sacrificed, and, except in a vague and roundabout way, it is the malady that is thus treated rather than the patient. The lack of a clearly-marked distinction between consulting practice, properly so called, and general attendance, has prevented the development of the more ordinary and useful department of work to its legitimate proportions; while the custom of setting up in practice as a consultee, and either retaining a previous general connexion, or, if the physician or surgeon be a young man, seeking to form one, has necessarily destroyed the *raison d'être* of the order of consultees, and called into existence a class of practitioners who have neither the experience of the steady general adviser nor the leisure and the training of the scientist, which form the only solid ground of his claim to act as referee in cases of difficulty.

No class of men practising exclusively as consultees, and corresponding to the Queen's counsel of the legal profession, exists in medicine. It is always possible for any lay person to obtain the advice of a physician or surgeon of the highest professional repute if he calls to pay a fee, which is seldom prohibitory. The consequence of this state of matters is that the custom of running away from the general practitioner on every pretence and in all considerable emergencies has become general; and the time seems near when either the class of family advisers will become extinct, at least in populous districts, or the practice of physicians and surgeons properly so called will need to be defined in the interests alike of the special and general branches of the profession and of the public. We cannot avoid the reflection that much of the inconvenience and conflict of interests experienced in daily practice, painful instances of which are repeatedly brought under our notice, must be attributed to the absence of a clear understanding as to fees and modes of practice. It may be Utopian to wish that our own profession could be recast after the model of the legal; but we are strongly of opinion that some reform of this nature is desirable. If the ordinary needs of the public could be met by general practitioners, except in regard to the few legitimate specialties which are now firmly recognised, and physicians and surgeons would act as consultees only, never taking ordinary fees or engaging in family practice, while the leading men placed their services at the disposal of the profession, refusing to see patients except in consultation, medicine would take higher status with the public, and its claims and privileges be more fully recognised. In these days of "progress" and "enlightenment," when wealth is the distinguishing mark of greatness, and the possession of money is a pass-key to every real or supposed

advantage, no mere readjustment of the scale of fees will suffice to restore the equilibrium of practice. Looked at from a humane point of view, it seems deplorable that the best advice should not, in an issue of life or death, be available for the succour of the poor as well as the rich. If the reforms to which we point were carried out, this evil would be minimised, if not uprooted. A consultee at the disposal of practitioners, instead of the public, would be relieved from the suspicion of competing with his brethren, and might safely leave the fee question in their hands. Moreover, he would be selected by a consensus of professional opinion, instead of being forced upon the profession, as sometimes happens, by the unqualified judgment of lay opinion. One of the collateral advantages of this method would be that enterprising practitioners ambitious of acting as consultees would cease to court popularity by appealing to the public outside the profession. As it is, this appeal is constantly made, and in the long-run the minority of sick persons reap the consequences, which are the reverse of advantageous. The relation of consultees and practitioners with each other and the public forms a subject of great interest and of daily increasing importance to the profession as a whole.

HOSPITAL treatment of puerperal women has received another severe discouragement from the recent catastrophe at the Queen Charlotte's Lying-in Hospital. Judging by past experience, however, there is too much reason to fear that the continued occurrence of such disasters will still be disregarded, and will fail to carry conviction to those who control the endowment and resources of the four principal metropolitan lying-in hospitals.

Since the beginning of this year the deaths of no less than eighteen women and twenty-six infants have been recorded in the Queen Charlotte's Lying-in Hospital; of these eleven women and twenty-one infants have died since the end of March. Most of the women died from puerperal fever, and the deaths of a large number of the infants were certified from erysipelas. The mortality of infants as well as of mothers almost invariably shows a marked excess in lying-in hospitals, but so distinct an epidemic of infantile erysipelas as that in the Queen Charlotte's Hospital is fortunately exceptional. Not so very long ago a similar epidemic of puerperal fever in the same hospital led to the closing of the institution. The hospital authorities did not then realise the grave responsibility they incurred by reopening it. Their tardy recognition of the serious character of the recent epidemic, moreover, calls for explanation. Dr. GRIGG, the physician to the hospital, in a letter published in *The Times* of Tuesday last, states, indeed, that the hospital "has been closed for nearly a month." This statement, however, appears to be somewhat difficult to reconcile with the fact (reported in the Registrar-General's Weekly Return) that the death of an infant aged six days occurred in the hospital on the 12th inst. from premature birth. It is also beyond dispute that the usual advertisement of the institution appeared in *The Times* of the 6th inst., announcing that in-patients would be received from all parts of the kingdom. It is, however, satisfactory to learn that "the causes of the outbreak are now under the consideration of a special committee, whose report will be issued shortly." It may also be hoped that the request for an official investigation into the circumstances of the epidemic and the sanitary condition of the hospital will meet with a prompt response.

It is not, however, so much the circumstances of this particular epidemic that require investigation as the question whether the hospital treatment of puerperal women shall be longer permitted, except under the most rigid supervision and the most stringent regulations. Since the beginning of 1876 the number of deliveries recorded in the five metropolitan hospitals that receive puerperal women has been 3365, resulting in the deaths of 94 women, showing an average proportion of 28 deaths of mothers to 1000 deliveries. The average proportion of deaths to deliveries in England and Wales in recent years would be less than 17 deaths, so that 77 (or 82 per cent.) of the 94 deaths of women in these five metropolitan lying-in hospitals since the beginning of 1876 have to be accounted for. Careful investigation should ascertain how many of these deaths were the result of difficult surgical cases, and how many inmates simply fell victims to the dangers apparently inseparable from the hospital treatment of puerperal women. The mortality of women in the Queen Charlotte's Hospital shows a marked excess during a long series of years; but exceptional fatality prevailed in 1873 and 1876, when 17 and 19 deaths of mothers were respectively recorded. We have before stated that 18 deaths of women have there been registered since the beginning of this year. The City of London and the General Lying-in Hospitals were both closed in the latter part of 1877, on account of excessive mortality of women, and we regret to learn, from the Registrar-General's last Weekly Return, that the former has just been re-opened, and that 11 births have been registered therein since the 1st instant. The British Lying-in Hospital showed no less than 10 deaths of mothers to 478 deliveries in the three years 1876-7-8, equal to a proportion of 21 per 1000. Not only one, therefore, but each of these four metropolitan hospitals affords striking examples of the fatal effect of hospital treatment of puerperal women. It will, of course, be urged that lying-in hospitals are necessary for obstetric students and for the training of midwives. But, granting their convenience for such purposes, it becomes a grave question whether the result justifies the maintenance of the system at such a terrible cost of life. We have no hesitation in repeating that the reception of puerperal women in hospital should immediately be placed under control and inspection, and restricted within limits which would secure almost absolute immunity from recurrent epidemics of puerperal fever.

If the greater part of the resources of our metropolitan lying-in hospitals were in future devoted to out-door maternity charity it would be difficult to over-estimate the value of the useful work which would be within their means. The Royal Maternity Charity of London was founded in 1757, and under its auspices no less than 9019 mothers were delivered during the three years 1875-6-7, and the mortality of women did not exceed 2·3 per 1000 deliveries. Ten years ago a severe outbreak of puerperal fever convinced the authorities of the Birmingham Lying-in Hospital that the in-door system was too fatal to justify its continuance. The hospital was therefore shut up, and the Birmingham Lying-in Charity founded on the model of the London Maternity

Charity. Four trained and certified midwives, acting under a Consulting Medical Board, have in the past ten years delivered 8607 mothers in Birmingham, of whom only 20 have died within 30 days of their delivery. The proportional mortality, therefore, in the Birmingham Lying-in Charity, as well as in the London Maternity Charity, does not exceed 2·3 per 1000 deliveries. This is less than half the average recorded proportion of puerperal mortality in England and Wales, and stands out in striking contrast to any records of hospital mortality at home or abroad. The authorities of the four principal metropolitan lying-in hospitals will find it difficult to justify further delay in following the example which the Birmingham Lying-in Hospital set, with such admirable results, to similar institutions more than ten years ago.

Out-door maternity charities, the establishment and support of which offer the most advantageous employment to thousands of women who are clamouring for useful work, might be made powerful engines for the promotion of public health and sanitary progress. Not only may a maternity charity save a large proportion of lives and suffering due to the neglect and mistreatment of women in their hour of need, but, properly directed, may exercise a powerful influence in reducing the excessive rate of infant mortality due to the mismanagement of infants. General puerperal and infant mortality are more intimately connected with the case of out-door maternity charities *versus* lying-in hospitals than is perhaps commonly admitted.

THE projected establishment of a new University at Manchester, after slumbering for a little while, has been revived, and a most influential deputation in support thereof waited on the Lord President of the Council last week. The scheme, when first broached, was a very crude one. Owens College was to have the power of granting degrees, and so have its status changed from a college to a university. The immediate effect of such a proposal was to excite the jealousy of all the other large towns in the north of England which possessed, *in esse* or *in posse*, any collegiate institution or school of science. Leeds and Liverpool quickly protested against it, and threatened its extinction, unless it were made so comprehensive as to lead to the formation of a northern university (in which they might be included), and which moreover was not to bear any such distinctively local name as the University of Manchester. The supporters of the claims of Owens College to become a university in itself have yielded to the pressure; Lancashire and Yorkshire have coalesced to ask for a charter by which this college may become the nucleus of a new university, whilst provisions are made for the affiliation of other educational bodies in the adjoining towns. The proposed institution is to be called the Victoria University. Local opposition has thus been most cleverly removed, and active support takes its place. But we would venture to ask if the original scheme is improved by this change of front? The reasons assigned by the authorities of Owens College for the elevation of their institution into a university were the excellence and thoroughness of their teaching, and the earnest desire—"almost amounting to a passion"—of the people of Manchester to possess the means of university culture. The mere changing of Owens College into a university does not, however, alter the quality of its teaching, or add to the culture of its students. It simply holds out the bait of a degree, as an additional attraction with which to draw students, and this is all that the scheme means. But the facilities for obtaining degrees in England are surely quite sufficient. What the Universities of Oxford, Cambridge, and Durham fail in supplying is amply filled by the University of London, to which Owens College is already affiliated.

The objection to the present system which has been brought forward by the Professors of Owens College is too paltry to bear close examination. They urge that their teaching is cramped by the fact that another body practically rules their curriculum; but other colleges, such as University and King's Colleges, are under the same conditions, and make no such complaint. Teachers at Owens College have very frequently been appointed examiners at the University of London, and we are not aware that any representations have been made by them to the Senate of the University that alterations were desirable in the existing regulations for their degrees. If any such suggestions have been offered, we are sure that they have had most careful consideration. The mere power of granting degrees cannot improve the teaching at Owens College in arts and science, nor increase the culture or quicken the intellectual life of Manchester. The other bodies which it proposes to affiliate are still in a most rudimentary condition; detached fragments of colleges, with incomplete teaching staffs, which do not even pretend to give a thorough all-round education. Degrees given under these circumstances by Owens College, even when called the Victoria University, are hardly likely to have great value in the world of letters and science. If this be doubted, let some other titles be given to their graduates than those now granted by the older universities, and we shall see whether there be much demand for them. But if the reasons adduced in favour of making Owens College a degree-giving university be so weak so far as arts and science are concerned, the arguments against it are infinitely more powerful in the case of medicine. The number of medical students at Owens College, even if added to those at the schools of medicine at Liverpool and Leeds, is not much, if at all, in excess of those at our largest metropolitan hospital. Can anybody seriously urge that the medical teaching at any of these provincial institutions is in the slightest degree better than at our large metropolitan schools? Why, then, should the power of granting degrees in medicine be conferred on them any more than on University or King's College, Guy's or St. Bartholomew's? The authorities at Owens College point to the Scotch universities, in whose track they wish to follow; but the multiplication of degree-granting bodies is such an unmixed evil, so far as medicine is concerned, that we cannot allow the merits of the Scotch system to be a sufficient excuse for the creation of another. We might even urge that Scotland might well do with one less. If the absorption of the University of Durham were a *sine quâ non* before the establishment of the University at Manchester, we should regard the proposal with less concern; but we suspect that the originators and supporters of this movement are much too wary to allow themselves to be drawn into such a snare as the question of the suppression of an old ecclesiastical

foundation would turn out to be, even though so *friendly* an adviser as the Member for the University of London urge them to this step.

Annotations.

"Ne quid nimis."

THE SELECT COMMITTEE ON MEDICAL REFORM.

THE Select Committee is not as yet nominated, nor, indeed, is it put down on the paper for nomination. It is said that Mr. Forster is to be Chairman. The delay in the appointment of the Committee makes it certain that no real work will be done on this side of the Whitsuntide holidays, and greatly diminishes the prospect of any actual legislation this year. It is far more important that the investigation by the Committee should be thorough than that it should be hasty. It is too soon yet to say whether it is to be merely formal or searching. Lord George Hamilton only tells us that the power to call witnesses will rest with the Committee, and that it will act according to its pleasure. There are some, indeed, who consider that the reference is a merely formal step, and that the Committee will regard the subject in a superficial way, and report in favour of the Government Bill. We can only say that we do not share that view. All the Bills are referred equally to the consideration of the Committee, and they raise very different issues. The Bill of Dr. Lush proposes to carry the principle of grouping together, for representation in the General Medical Council, bodies of a similar character. This principle of grouping has the great recommendation of being already a part of the original Medical Act, only in that measure it was applied badly. To bodies entitled by reason of their importance in medical education (if this constitutes a claim)—i.e., the Scotch universities—only half a representative in the Medical Council is given; while to very unimportant bodies in England, Ireland, and Scotland, a distinct seat is allotted. The Bill of Mr. Mills deals with the question of adding to the Medical Council, as at present constituted, six direct representatives of the profession. Mr. Errington's Bill raises the question of a new Examining Board, to be appointed by the General Medical Council, and in so doing implies the untrustworthiness of the existing examining bodies; though, strange to say, he retains in all their authority and privileges the bodies that he so disparages. The Government Bill, as passed by the House of Lords, fastens in a most praiseworthy manner responsibility on the General Medical Council for examination rules, and so alters vitally the functions of the Medical Council. In this way we may feel confident that all the essential questions of medical reform will be brought under the notice of the Committee; and it will be the fault of that body if they are treated superficially, or if the most unprejudiced evidence that can be obtained is not taken. It will not satisfy either the public or the profession for the Committee to ask the representatives of the Medical Council and of the bodies in Schedule A of the Medical Act, to give evidence. This would be a mere farce. We cannot believe that a Government which has granted a Committee will sanction that Committee going through its work in a perfunctory or delusive manner.

HYDROPHOBIA.

A FORMIDABLE outbreak of hydrophobia is reported from Lancashire, where the disease has, for a long time, been so frequent. In the middle of April a mastiff ran through a considerable portion of Preston, and bit two asses, many dogs, five children, and a man. Eleven of the dogs were destroyed the same night, the asses were shot next day, and nine dogs have since been poisoned by the police. On May 12th one of the children attacked, a boy aged six years, who had been severely bitten upon the face (a portion of the cheek having been torn away), showed symptoms of hydrophobia, and died on the 14th. A second child also showed symptoms of the disease on the same day as the other. It is one of the melancholy circumstances attending the ravages of rabid dogs that so large a number of children usually suffer. They are unable to escape, and parts unprotected by clothes, as the face, are more readily accessible to the animal than the corresponding parts in adults, and the bites are often so severe and so situated that their efficient canterisation is impossible.

A somewhat doubtful case of hydrophobia was investigated by the Manchester coroner on the 8th. A man aged forty-one had been bitten by a watch-dog, not supposed to be rabid, nine years ago. The wound was twice cauterised and healed. Eighteen months ago a bitch, with pups, flew at him and bit his finger, but as he did not show the bite to his wife it is supposed that the injury was of a very trifling character. On May 1st he complained of a rheumatic-like pain in the left arm. He began to ramble in his conversation, and was removed to the workhouse hospital. Next day he became violent, and had to be restrained. He often asked for water, but on its being given to him he threw the vessel away, sometimes beating himself about the head with it. The same evening he told several persons that he "had been bitten by a dog, and was going mad." Next day he died. The medical officer who made a post-mortem examination was of opinion that the case must be regarded as one of hydrophobia, and a verdict to that effect was returned by the jury.

SIR GARNET WOLSELEY ON CYPRUS.

IN forwarding to the Secretary of State the report of the principal medical officer on the health of the troops in Cyprus, Sir Garnet Wolseley takes the opportunity to have a fling at medical statistics—those records of facts which are so often extremely inconvenient to the military authorities. "I take the liberty," he observes, "of pointing out the misleading tendency of all medical statistics which are only based upon an experience of six or seven months in any country, especially when it is impossible to compare them with the statistics of similar months in other years." And, again: "To those unused to analyse medical statistics, the death-rates given by Sir A. Home are likely to convey a very erroneous impression, as they are calculated (according to the regulations of the service) upon the assumption that had the 42nd, 71st, and 100th Regiments stayed here a whole year the rate would have continued during the cool months to be the same as it had been during the unhealthy season." Now, to this statement we take exception. It is not assumed that the mortality would continue at the same rate through the healthy as through the unhealthy season. The object of the calculations is to reduce to a common standard observations extending over widely differing numbers of individuals and periods of time, and is exactly analogous to reducing to percentages the statements relative to the returns yielded by various investments of money. If Sir Garnet's first objection to medical statistics were valid, it would be impossible to draw any conclusions from observations for a less period than a year, or for any place which had not been previously occupied by troops. The statistics of Cyprus, as they now stand, do not furnish us with materials wherewith to forecast its future as a station for troops from a health-point of view, but they afford us valuable information as to what we have paid for our hasty occupation of the island, and we trust they have taught a lesson as to

the necessity for more foresight in sanitary matters should an occasion ever again arise when a similar hastily got-up expedition may be deemed necessary. But Sir Garnet does not confine his objections to Sir A. Home's statistics. He dissents also from his statements as to the quality of the meat, the bread, and the cooking. But his remarks appear to bear out the fact that these were decidedly objectionable, qualified by the opinion that it was impossible, under the circumstances, to obtain better. Accepting his opinions, it still appears that those of Sir A. Home were, in point of fact, correct, and if looked at as intended for guidance in the future rather than in condemnation of the past, were fully justified. Both officers agree that if the troops are quartered at sufficient height above the sea, and are properly housed, clothed, and fed, they may be expected to be as healthy and as efficient as at any other part on the shores of the Mediterranean. But could a more severe criticism than this be passed on the manner in which the military occupation of the island actually took place?

THE PHYSIOLOGY OF SUGAR IN RELATION TO THE BLOOD.

AT a meeting of the Royal Society, April 24th, Dr. Pavy brought forward the results of his further researches on the physiology of sugar in relation to the blood, and which are supplemental to those published in the Proceedings of the Royal Society for June, 1877. At that time some important physiological conclusions had been drawn by Bernard from the results obtained through a modified method introduced by him of employing Fehling's solution, and Dr. Pavy in his communication pointed out the manner in which he thought the process open to fallacy, and endeavoured to show that the results yielded by it differed to a marked extent from those yielded by a gravimetric method which he employed. He has since devised a new process, which was fully described in THE LANCET, February 1st of the present year. By means of this process an opportunity has been afforded Dr. Pavy of ascertaining on which side the fault lies in the disagreement between the results obtained by Bernard and by the gravimetric method. On comparing the results given by the three processes—viz., Bernard's potash process, the gravimetric process, and Dr. Pavy's new ammoniated cupric process—attention is first called to the fact that reliance cannot be placed upon the formula adopted by Bernard for calculating the volume of liquid derivable from the weight of blood taken for analysis. Again, it will be seen that the results obtained by the method of analysis involving the employment of the potash stand considerably higher than those yielded by the ammoniated form of the test. It is probable that the action of the potash on the incidental organic matter present may give rise to the required condition for maintaining the suboxide in the dissolved state—a reducing substance becomes developed, or else the amount of oxide of copper appropriated to the oxidation of the sugar becomes altered in the presence of the large amount of potash which it is necessary to employ. But whilst a considerable difference exists between the potash process and the ammoniated cupric process, a close conformity subsists between the latter and the gravimetric method.

Dr. Pavy has employed the ammoniated cupric test to investigate the circumstances connected with the spontaneous disappearance of sugar from the blood after withdrawal from the body. As is well known, Bernard held that the natural seat of this destruction within the system is in the systemic capillaries. Should, therefore, it be shown that an active disappearance of sugar occurs in the blood after removal from the vessels, support would be given to this view. Dr. Pavy, however, with the ammoniated cupric process, has arrived at results quite irreconcileable with Bernard's statement that at the end of twenty-four hours the blood ceases to give any indication of the presence of sugar. On the contrary, in numerous instances where the blood had been kept, not merely for twenty-four hours, but till actual putrefaction had occurred, did Dr. Pavy fail to find it exercise considerable reducing power over the copper test. In following these experiments of Dr. Pavy's it will be seen that there is a period during the first few days when the reducing power undergoes a pretty sudden fall, and that after that it remains stationary. Dr. Pavy, from this circumstance, would suggest that there exists in the blood some other reducing agent which comports itself differently from sugar. For if the reducing action were due solely to sugar, it is not intelligible, as he observes, why there should be a more or less sharp descent to a certain point, and then that the condition should remain comparatively stationary—why, in fact, the last portion of sugar should behave differently from the first. Moreover, it seems that this reducing agent, whatever it be, possesses a stability greater than that enjoyed by sugar, so much so that it resists the influence of the changes of decomposition, and produces its reducing action in the copper solution after keeping thirty days. Dr. Pavy has also instituted some experiments with the view of ascertaining whether the passage of a current of oxygen through blood containing added sugar had any effect in promoting the disappearance of sugar, and counterpart observations were made with carbolic acid and hydrogen. Dr. Pavy has arrived at the conclusion that there is no evidence of chemical action being exerted. Whatever slight effect occurred he believes to have arisen from increased molecular action excited by the transit of the gas.

LAST WINTER'S DEATH-RATE.

THE Registrar-General's quarterly return, just issued, enables us to count the cost of the long and trying winter of 1878-9. The main result of the Registrar-General's elaborate analysis of the mortality statistics of the first three months of this year is to show that the cold of the past winter, which prevailed with little intermission during the four months, November, December, January, and February, did not exercise so fatal an influence on the rate of mortality as the shorter periods of more severe cold in the first quarters of 1870 and 1875. The annual rate of mortality in England and Wales during last quarter was equal to 25·2 per 1000, which exceeded by 1·1 the average rate in the ten preceding corresponding quarters. In the first quarters of 1870 and 1875, however, the death-rate had been equal to 26·0 and 27·5 per 1000 respectively. In the severely cold first quarter of 1855 the death-rate was equal to 29·1, whereas in the corresponding period of 1846, which was unusually mild, the rate did not exceed 21·6. The rate last quarter, which was equal to 25·2 per 1000 among persons of both sexes, was 26·3 among males, and did not exceed 24·1 among females. Compared with the rates that prevailed in the milder first quarter of 1879, the excess of male mortality last quarter did not exceed 8·7 per cent., whereas the female rate showed an excess of 12·1 per cent. The cold of last winter was therefore much more fatal among males than among females, notwithstanding the far more general exposure of the male population to the inclemency of the weather. It is also pointed out by the Registrar-General that the excess of mortality due to cold was last quarter much greater in rural than in urban populations; this is attributed to the far larger proportion of elderly persons living in rural populations. It appears that the mortality last quarter, compared with the average mortality in the nine preceding corresponding quarters, showed an excess of 1·3 per cent. among infants under one year of age, and was 1·5 per cent. below the average among children and adults aged between one and sixty

years. Among persons aged upwards of sixty years, however, the proportional excess was equal to 20·8 per cent. Thus the excess of mortality last quarter may be said to have been confined to elderly persons. Apart from the results of the low winter temperature, the mortality returns of the first quarter of this year present several features indicative of improving sanitary conditions. The fatality from the seven principal zymotic diseases was lower than in any previous corresponding quarter on record; and the annual death-rate from fever, which was equal to 0·75 in the first quarter of 1870, did not exceed 0·32 last quarter. Thus the mortality from fever, perhaps the most distinctive of filth diseases, has shown a decline of 57 per cent. during the past nine years. The most marked decline in fever fatality has occurred in large towns, the greatest excess being now recorded in the smaller urban aggregations in mining and manufacturing districts.

THE SPHYGMOPHONE.

AT the last meeting of the Royal Society, Dr. Richardson demonstrated the action of a new invention of his own, which he calls the sphygmophone, and by which he transmutes the movements of the arterial pulse into loud telephonic sounds. In this apparatus the needle of a Pond's sphygmograph is made to traverse a metal or carbon plate, which is connected with the zinc pole of a Leclanché cell. To the metal stem of the sphygmograph is then attached one terminal of the telephone, the other terminal of the telephone being connected with the opposite pole of the battery. When the whole is ready the sphygmograph is brought into use as if a tracing were about to be taken, and when the pulsation of the needle from the pulse strokes is secured, the needle, which previously was held back, is thrown over, so as to make its point just touch the metal or carbon plate, and to traverse the plate to and fro with each pulsation. In so moving, three sounds, one long and two short, are given out from the telephone, which sounds correspond with the first, second, and third events of sphygmographic reading. In fact, the pulse talks telephonically, and so loudly that when two cells are used the sounds can be heard by an audience of several hundred people. By extending the telephone wires the sounds also can be conveyed long distances, so that a physician in his consulting-room might listen to the heart or pulse of a patient lying in bed (speaking modestly as to distance) a mile or two away. Dr. Richardson described to the fellows of the Royal Society that the sounds yielded by the natural pulse resemble the two words "bother it." Not a bad commencement for a talking pulse.

At the same meeting Dr. Richardson demonstrated the use of an instrument just invented by Professor Hughes, the discoverer of the microphone, and named the "audiometer," fuller notice of which, however, must be deferred till next week.

QUEEN'S UNIVERSITY IN IRELAND.

A MEMORIAL has been forwarded by the Chancellor of the Queen's University in Ireland (on behalf of the Committee of Convocation) to Lord Beaconsfield, drawing his attention to the progress which it has made since its foundation in 1850, and the good results which have ensued. The memorialists submit that the time has come when the University should be represented in Parliament, it being the only university in the kingdom which remains unrepresented, with the exception of that of Durham. The graduates now number close on 1800, and are increasing by about 90 a year, many having risen to distinction in the public services, in the learned professions, and in other careers. Finally, the memorialists urge that, irrespective of the aid that a member for the University might be expected to give in the consideration of questions of public moment, he would be enabled, as more especially charged with the care of matters of vital importance to the Queen's University, to represent an interest not now directly represented in the House of Commons, and which is the subject of much attack and misrepresentation.

THE METROPOLITAN HOSPITAL SUNDAY FUND.

THE Council met on Monday last, under the presidency of Alderman M'Arthur, M.P., at the Mansion House, to make the necessary arrangements for the approaching collection, and to discuss the report of the General Purposes Committee with reference to the tabulation of the mass of valuable information supplied by the participating charities, so as to make it more available for the use of the Council. A table was agreed to, the heads of which are as follows: the three years' average gross annual income as well as expenditure; payments by patients; percentage of cost of management to that of maintenance, &c.; in hospitals, the number of beds occupied; in dispensaries, the number of home visits, &c. Dr. Risdon Bennett suggested the desirableness of each institution trying to determine the number of distinct persons it relieved in the year, as distinguished from renewals of letters. It was agreed that the Secretary should communicate with the institutions with a view to getting this important information. The feeling was general in the Council that the data for estimating the number of persons relieved by London charities are at present almost worthless, though the wildest statements are freely made and mechanically repeated. The Council does at once its duty and great public service when it tries to give precision to hospital and dispensary returns. The Council does not yet see its way to ask from the Committee of Distribution information as to the arithmetical basis of each hospital and dispensary, and the actual basis as determined by the discretion of the Committee. Seeing that the Council is ultimately responsible for the awards by having to confirm them, and that there is nothing like publicity and discussion for disarming criticism, this is to be regretted. But a good beginning has been made, and the public will feel more and more assured that the fund is administered upon impartial and wise principles.

MR. JOHN LIDDLE AND THE WHITECHAPEL DISTRICT.

AS a part of his report for the quarter ending the 28th December, 1878, Mr. John Liddle, the medical officer of health for Whitechapel, publishes his twenty-third annual report. His services to Whitechapel cover the whole period from the passing of the Act for the better Local Management of the Metropolis in 1855 to the present time. The record of these services is preserved in the ninety quarterly reports which he has presented to the Whitechapel district during that period, reports not less remarkable for their admirable arrangement than for their thoroughness of apprehension of the functions devolving upon a medical officer of health. Looking back over his many years of official work, it is perhaps natural that Mr. Liddle should give greater heed to what remains to be done in the district under his supervision than to what has been accomplished. But to the outsider who has some knowledge of the peculiarities of the district and of its population, and who is able to compare its present with its former condition, the marvel is that so much has been achieved rather than that many things still remain to be achieved. To say that Whitechapel has been transformed within the period referred to is to state a fact of which the true and full significance could not be made clearly evident to those who are unfamiliar with the district without a volume of descrip-

tion. We hope that Mr. Liddle may live to write a connected history of this transformation, in justice to his Board of Works, to himself, and to his subordinates, as an encouragement to other local authorities and as an example of the fashion in which the most God-forsaken districts may surely be redeemed from apparent sanitary hopelessness. The whole story would redound so much to the honour of the Whitechapel Board of Works, and be of such general utility, that that body would do well to have it put on record.

THE MIDLAND MEDICAL SOCIETY AND LUNACY LAW REFORM.

A SPECIAL meeting of this Society was held on Wednesday, the 21st, in the Queen's College, Birmingham (the chair being taken by the President, Mr. H. M. Morgan), "To consider and discuss the proposed legislation for the amendment of the Lunacy Laws, with special reference to the responsibilities of the medical profession, and the proposed conversion of private into public asylums; and, further, to pass such resolutions as the meeting may determine." Dr. G. F. Bodington opened the discussion by an address. On the motion of Mr. W. G. Balfour, of London, seconded by Mr. Lawson Tait, of Birmingham, a resolution was passed to the effect that, while in no way condemning the manner in which licensed houses for the insane have been conducted by medical proprietors, it is desirable to support the principle of Mr. Dillwyn's Bill.

THE SANITARY CONDITION OF MANCHESTER.

IT has recently been asserted, on apparently good authority, that, judged by the standard of mortality statistics, Manchester has recently lost much sanitary ground, compared either with Liverpool or Glasgow. It may be useful briefly to consider the recent mortality statistics of the city of Manchester with a special view to their comparison with those of Liverpool. It was in 1865 that the Registrar-General began to publish periodical vital statistics of a few of our largest English towns; these naturally included both Liverpool and Manchester. During the fourteen years 1865–78 the annual rate of mortality in the city of Manchester ranged from 33·9 in 1865, to 27·4 in 1877. The annual rate in the whole period averaged 30·7 per 1000, against 31·2 for the same period in Liverpool. Dividing these fourteen years into two equal periods of seven years, it appears that the Manchester death-rate declined from 32·2 per 1000 in the earlier seven years, to 29·1 in the later seven years 1872–8. Sanitary progress in Manchester may be inferred from the fact that the mortality of the city was nearly 10 per cent. less in the later than in the earlier of these two periods of seven years. Expressed in a different manner, in equal numbers living, only 90 persons have died in Manchester during the seven years 1872–8, to each 100 who died in the preceding years 1865–71. A comparison of the same periods in Liverpool, however, shows a decline of 18 per cent. instead of the 10 per cent. in Manchester. It may be said, with truth, that the Liverpool death-rate showed the larger excess in the early half of the period of fourteen years. In the seven years 1865–71 the Liverpool rate averaged 34·3, against 32·2 in Manchester; but in the last seven years the tables have been turned, and while the Manchester rate averaged 29·1, the Liverpool rate had fallen to 28·0. There is no use in disguising or attempting to deny the fact that in recent years Manchester has been left behind by Liverpool in the struggle for sanitary progress, and now occupies the position of the unhealthiest of our largest English towns, judged by their mortality statistics. Since 1870 the Registrar-General has published more detailed mortality statistics for our largest towns, which affords the means for closer analysis of those for Manchester. During these past nine years 1870–8 the death-rate in the city has averaged 29·4 per 1000, and has exceeded by no less than 5 per 1000 the average rate in the twenty large towns, including London. The annual death-rate from the seven principal zymotic diseases in Manchester averaged 5·3 per 1000 in the nine years, against 4·6, the average rate in the twenty towns. It is quite evident, however, that only a small portion of the large excess in the death-rate in Manchester has been due to zymotic fatality. Indeed, it is an unexpected result of the comparison of the mortality statistics of Liverpool and Manchester to find that while zymotic fatality is much greater in Liverpool than in Manchester, the death-rate from all other causes shows a marked excess in the latter town. Nothing but careful and detailed investigation would show to which classes of disease the excess of mortality in Manchester is chiefly due. The annual death-rate from fever (mainly enteric) in Manchester, which has averaged 0·74 per 1000 during the past nine years, declined from 0·91 in the five years 1870–4 to 0·53 in the last four years 1875–8. Such a marked decrease in the fatality of this distinctive filth-disease is as satisfactory a sign of sanitary progress as is the decline of infant mortality. During the past nine years no less than 190 of every 1000 children born in Manchester have died under one year of age; but whereas the proportion was equal to 202 in the five years 1870–4, it did not exceed 175 in the more recent four years 1875–8. It is evident, therefore, that the health of Manchester is improving, but far too slowly—so slowly that even Liverpool (long by far the unhealthiest of our towns) has pushed in front, and left her behind, as the city showing the highest death-rate among our largest English towns. Manchester cannot allow herself to remain in this position, and we feel sure that the determination will not long be wanting to lift herself higher in the sanitary scale.

THE CASE OF MR. MILLERCHIP.

AT a meeting of the Cambridgeshire and Huntingdonshire Branch of the British Medical Association held at Bishop's Stortford on May 13th, the following resolution was unanimously adopted, and a copy ordered to be sent to Lord Chief Justice Coleridge and to Mr. Secretary Cross:—"That the members of the British Medical Association present at this meeting, having had before them the evidence upon which Mr. Millerchip, of Coventry, was recently convicted of manslaughter, and sentenced by Lord Chief Justice Coleridge to four months' imprisonment with hard labour, do not hesitate to express their opinion that the medical evidence for the prosecution, taken in conjunction with that for the defence, did not justify the verdict returned; and, considering the circumstances of the case, the meeting is of opinion that the punishment inflicted was extremely severe."

THE NAVAL MEDICAL SERVICE.

WE have received during the past week a very voluminous epistle from a naval medical officer, too long to publish *in extenso*, but containing some curious statements and facts, the practical effect of which must be to depopularise, as well as depopulate, the service very considerably. With respect to cabin accommodation, the writer recites that on H.M.S. *Duncan*, off Sheerness, the fleet surgeon doing duty is relegated to a cabin on the orlop deck, although the Admiralty regulations allow him a main-deck cabin, and there is, moreover, on this ship a very spacious deck. This particular surgeon is fifty-six years old, and has had thirty-three years' service. Again, on H.M.S. *Invincible* the surgeon is put below, but is told that he can have, if he pleases, a cabin next to the closet above. In the matter of house accommodation, it seems that at Chatham, the house apportioned to the surgeon for the last thirty years has been taken by

the cashier, and the medical officer is accommodated in the carpenters' quarters! And a house at Portsmouth, bought specially some time since for the fleet surgeon of marines, has been given to an officer junior in rank.

After some other pertinent facts recorded, the writer reminds us that, from 1870 to 1874, 130 surgeons entered the navy. Of this number, 2 were promoted for war service, 7 have died, 10 have been dismissed or tried by court-martial, and 32 have resigned. It appears also that those who have taken first places at each examination during these five years are *now* out of the navy. In fact, it seems that almost all those who have resigned had attained high positions. The army in the same period shows 105 entries, and only nine losses from *all* causes. We take these statements from a long list of grievances, and prefer to do so without further comment at the present time.

DIPHTHERIA IN PARIS.

IF the opinion put forward by Dr. Thorne in his most important and suggestive remarks on the recent debate at the Medical and Chirurgical Society is correct, that diphtheria is now in process of development as a specific disease, acquiring stability by repeated propagation, the process is probably advancing more rapidly, and possibly is advanced further, on the Continent than in this country. In the intensely insanitary conditions of Russia, and, indeed, of many of the large continental towns, all the conditions for the cultivation of the disease appear not only to exist, but to be in full operation. The accounts of its prevalence in Paris, which are published from time to time in the official reports of M. Ernest Besnier, are not calculated to allay apprehensions from this point of view. The prevalence of the disease has of late years been uniformly such as was before unknown, and at the present time it is more fatal than any other general affection. During the first three months of this year 151 persons died in Paris from small-pox, 320 from typhoid fever, and 529 from diphtheria. This excessive prevalence, as M. Besnier points out, in the case of a disease in which treatment is so powerless, is an epidemiological fact of the greatest importance, for it is not apparently an accidental or transient excess, since it has developed slowly, gradually, and progressively. He believes that he has ascertained the law of the prevalence of the disease at different periods of the year, for he finds that whatever the prevalence and severity of the epidemic of diphtheria, every year the lowest figure is reached in the third quarter of the year; it rises during the fourth, attains its maximum in the first, and falls gradually during the second quarter.

The influence which certain hospitals exert in the propagation of the disease is a very discreditable fact. In most of the Paris hospitals diphtheritic patients are still treated in wards containing other children. The consequences may be imagined when, as now, the general conditions, whatever they are, which favour the prevalence of the disease, are in full operation. During the first three months of this year, at the Hôpital des Enfants Malades, there were, among the patients of one physician, thirty-six cases of diphtheria, of which eighteen were admitted with the disease and eighteen contracted it in the hospital! In one ward of thirty beds, twelve cases of diphtheria developed during the three months, of which seven died, while two were removed by their friends, to constitute centres of infection outside. The list given by M. Gaucher, the interne, is one of the saddest documents we have read for a long time. Most of the children who contracted the disease were suffering from slight attacks of chorea, typhoid fever, diarrhœa, or bronchitis. In this hospital—it might almost better be called a slaughterhouse—for children there is no isolation for cases of diphtheria, measles, or scarlet fever; small-pox alone is treated in a separate ward. It is worthy of note, in relation to the late discussion, that no distinction is made by the Paris sanitary authorities between membranous croup and diphtheria.

A NEW VIEW OF LIFE-INSURANCE EXAMINATIONS.

A TRANSATLANTIC contemporary thinks that the medical examiners of life-insurance companies would do well if they would give consideration not merely to the physical state of the proposed insurer at the time of his examination, but also to the sanitary conditions under which he lives. In New York, at least, our contemporary implies, it is of as much consequence to discriminate "hazardous houses" as "hazardous lives." In this country the additional information suggested could be readily obtained by requiring each proposed insurer to produce a certificate from the medical officer of his district of the sanitary condition of his residence; but we question whether the notion will commend itself to our insurance companies, either on the score of its necessity or of the additional cost in fees it would involve.

UNIVERSITY COLLEGE HOSPITAL.

THE Reverend Dr. Stebbing, F.R.S., has resigned the chaplaincy of this hospital after serving the institution for more than forty-five years, he having been the first chaplain appointed after its foundation in 1833. Dr. Stebbing endeared himself to everyone with whom he came in contact, by the genuine and guileless amiability of his character, and by the conciliatory and truly Christian manner in which he performed the duties of his office. It is proposed to present Dr. Stebbing with a testimonial on his retirement, and doubtless many former students of the hospital will be glad to show their regard for this distinguished clergyman by contributing to the fund which is being raised. Subscriptions may be forwarded to Mr. Enfield, the treasurer of the hospital; to Dr. Hare, 57, Brook-street; Dr. Poore, 30, Wimpole-street; or Mr. McCaul, 16, Taviton-street, W.C.

URÆMIA.

THE doctrine of uræmia, in the literal sense, has almost disappeared from theoretical pathology. Frerichs and Gallois are believed to have demonstrated that whatever poison is circulating in the blood it is not urea. Gallois especially maintained that urea injected into the blood of dogs is incapable of causing the symptoms of "uræmia." It cannot, however, be said that the attempts at any other explanation have been more successful. The carbonate of ammonia theory has never received enough evidence to render it even probable, while Bernard demonstrated that this substance is incapable of determining the symptoms which have to be explained. The doctrine that the poison is really urea has been revived by M. Picard, of Lyons, in a recent communication to the Société de Biologie of Paris. He states that he has succeeded in causing in dogs convulsive attacks by the injection of urea. As an example of these experiments he gives the following:—Fifteen grammes of urea were injected in solution into the jugular vein of a dog weighing two kilogrammes and a half. The animal, after some minutes and some attempts at vomiting, presented tremor and then an epileptiform convulsion. The head was thrown back, the jaws champed, and clonic spasm was equally intense in all four limbs. The attack lasted some minutes, and was followed at short intervals by two other identical attacks. After that the animal was motionless, in a state of muscular relaxation, and soon died.

The explanation of the occasional failure of the experiment M. Picard believes to be this. If a sufficient quantity was injected, there coincided with the above symptoms a

complete suppression of the urinary secretion. The bladder emptied itself at the commencement, and remained empty till death. On the other hand, if an insufficient quantity was injected, there was an enormous increase in the urinary secretion, and the urea was eliminated as fast as it entered the blood. In this way large quantities of urea could be injected gradually, without inducing any other trouble than polyuria.

M. Picard concludes from these experiments that urea is doubtless the cause of the nervous symptoms of renal disease. This is probably an inference hardly warranted by the results obtained. He certainly, however, has demonstrated an important source of fallacy in experiments on this subject, and has shown that the theory of a true uræmia cannot be considered as altogether defunct.

"BLACK DEATH" IN THE CAUCASUS.

THE Government of the Caucasus has thought it requisite to issue an official statement as to the reported fatal malady which has broken out in the province. It would appear that this malady has shown itself in the district of Gori, and on the news reaching Tiflis the governor of the town, accompanied by a medical commission, immediately proceeded to inspect the localities in which the sickness had appeared. They found, as it would seem, that the malady was designated indifferently by the inhabitants "black death" or "scarlet fever"; but the commissioners content themselves with giving the following negative information about it—namely, that it was caused by "chills," and was not contagious (a conclusion which puts scarlet fever out of the question). Further, it is added, the disease is not typhus. Obviously this official utterance serves only to darken knowledge of the disease in question.

THE RED CROSS.

THE Russian Red Cross Society held its general meeting on the 12th inst.; General Baumgarten, president of the Central Committee, in the chair. In opening the meeting the chairman congratulated the members on the great work which had been done by the Society during the war just ended. It had been hoped that a complete account of the proceedings of the Society would have been laid before the meeting, but reports from the whole of the delegates had not been received, and until they had come in a general statement could not be prepared. The preparation of this statement would involve great labour, but it was hoped that it might be ready in the autumn. It was mentioned that Dr. Pirogow's report of his sanitary mission to the hospitals in rear of the Army of the South was in the press.

THE EDINBURGH UNIVERSITY MURCHISON MEMORIAL.

IT having been determined, under the auspices of the Edinburgh University Club in London, to institute a memorial of the late Dr. Charles Murchison, in connexion with his University, to which he was known to be very warmly attached, a meeting will be held to discuss the measure, at the house of Mr. Lister, No. 12, Park-crescent, Portland-place, at 5 o'clock on Thursday, the 29th instant, when all persons who may be interested in the scheme are invited to be present.

REINFORCEMENTS FOR ZULULAND.

A STRONG detachment of the Army Hospital Corps, consisting of 2 officers and 120 non-commissioned officers and men, under the command of an officer of the Army Medical Department, are held in readiness to proceed to Natal with the drafts now under orders for the seat of war. Large quantities of medical comforts—wine, brandy, condensed milk, Liebig's extract, and Kopf's erbswurst, which has been very highly spoken of in Afghanistan—are also waiting shipment to replace the articles which were unfortunately lost by the foundering of the transport *Clyde* off Simon's Bay on her way to Durban.

HYDATID OF THE SKIN.

AN example of this rare condition was presented by Dr. G. Schiff to the K. K. Gesellschaft der Aerzte, in Vienna, on the 18th ult. The patient was a man thirty years of age, who, for about a year, had suffered from scattered roundish movable tumours in different parts of the skin. They varied in size from that of a pea to that of a hazel-nut. They were uniform, presenting no lobulation, and the skin over them was normal. These characters distinguished the tumours from fatty, fibroid, and atheromatous growths. The diagnosis of hydatids had been made by Professor Auspitz, and the examination of one of the tumours, which was excised, proved the opinion of their nature to be correct. The patient had also suffered from muscular tremors and epileptic attacks since an attack of typhus in his tenth year. The same diagnosis was ventured on in a second case, but excision of one of the tumours showed them to be fatty.

THE FORTY-SECOND REGIMENT.

WE are glad to learn that the Forty-second Regiment is to return to England immediately, and to be quartered in the Isle of Wight. The cause of this removal is, we understand, the continued sickly state of the regiment since its arrival in Gibraltar from Cyprus. It has been wisely determined not to expose it to the risk of passing the hot summer months in Gibraltar, lest it should suffer from a recurrence of fever, the susceptibility to which it contracted first in Ashantee, and again in Cyprus.

THE BRITISH PLAGUE COMMISSIONERS.

SURGEON-MAJOR COLVILL returned to town, from his mission in Russia, on Saturday last, the 17th instant; and his colleague, Dr. Payne, we are glad to learn, has recovered from the malarious fever with which he was attacked in Astrakhan. He is at present in Berlin, where he proposes to remain for a few days, before returning to England.

SURGEON-MAJOR REYNOLDS.

WE have reason to believe that the Victoria Cross will be conferred upon Surgeon-Major Reynolds for his gallant conduct at Rorke's Drift.

THE Bridgnorth urban medical officer of health (Mr. Alfred Mathias), upon being called upon for his quarterly report at the last meeting of the Town Council, stated that he had no report to make, and no sanitary defects to bring under their notice; the only complaint he had was, that he was receiving too much money for the work he did. He did not believe it was right for him to take public money that he did not earn; he therefore proposed that his salary should be reduced by £10—viz., from £30 to £20 per annum.

CATTLE-PLAGUE has broken out in St. Petersburg. Thirty cases had been reported to the authorities in the early part of this month. The beasts affected were destroyed as discovered, and the owners compensated. Home cattle generally were to be removed from the city, and subjected to the strictest supervision.

THE name of Dr. Roe, lecturer on Midwifery in the Royal College of Surgeons in Ireland, may be added to the list of candidates we gave last week, as aspiring to a seat on the Council of that institution.

THE anniversary arrangements of the British Medical Temperance Association on the 30th inst. begin with an address from the President-elect, Dr. B. W. Richardson, in the rooms of the Medical Society, Chandos-street, at 5 P.M. The address will touch on the relations the medical profession ought to occupy to the alcohol question. There will be a dinner at the Langham Hotel, Dr. Richardson in the chair.

WE are gratified to observe that Dr. Robert Fowler is a candidate for the vacancy created by the death of Dr. Nicoll, late medical officer of the Charterhouse. Dr. Fowler is favourably known to the profession by his very useful Medical Lexicon, a work displaying sound professional acquirements and great industry.

THE chairman of the Irish Prisons Board has formally announced to surgeons of county infirmaries acting as medical officers of prisons in Ireland that their posts are vacant, in consequence of the Prisons Act of 1877 having relieved them from attendance after April 1st, 1878, the date at which the various local prisons came under the control of the General Prisons Board.

THE medical officer of health of Cardiff has made an official complaint against the practice of holding "wakes," still maintained by the Irish population of that town. We have frequently pointed out the dangers of this custom, and trust the local authorities will energetically support their medical officer in his attempt to abolish this fruitful method of propagating disease.

DEPUTY SURGEON-GENERAL BENJAMIN TYDD has been appointed head of the Statistical Branch of the War Office, Whitehall-yard, *vice* Deputy Surgeon-General J. M. S. Fogo, who has proceeded to Bombay as Principal Medical Officer of that Presidency.

Mr. BARWELL will submit a special series of cases of aneurism to the Medical and Chirurgical Society on Tuesday next.

BRISTOL MEDICAL SCHOOL.

THE annual distribution of prizes at this school, at which Mr. Lewis Fry, M.P., presided on May 5th, was of special interest, owing to the fact that it was made the occasion for a statement of the important and satisfactory changes that have recently been completed in the constitution of the school. In the course of his report, the honorary secretary, Dr. Markham Skerritt, stated that a new agreement had been entered into between the Medical School and University College, Bristol, according to which the school was affiliated with the college as its medical department, and would be provided by the college with new buildings and all necessary appliances, while the management of the school was placed in the hands of a governing body composed as follows:—Three members elected by the staff of the Infirmary: Dr. Brittan and Dr. Long Fox, consulting physicians; and Mr. Prichard, consulting surgeon. Three members elected by the staff of the General Hospital: Dr. Burder, senior physician; Dr. Siddall, physician; and Mr. Lansdown, senior surgeon. One member elected by the committee of the Infirmary: Rev. J. Heyworth, president of the Infirmary. One member elected by the committee of the General Hospital: Mr. H. Naish, chairman of the committee. Two members elected by the faculty of the school: Dr. Shingleton Smith, lecturer on physiology; and Dr. Markham Skerritt, lecturer on medicine. Five members elected by the Council of University College, Bristol: Mr. Proctor Baker, treasurer of University College (chairman); Mr. Budd, chairman of the Council of University College; Rev. Dr. Caldicott, head-master of Bristol Grammar School; Mr. Lewis Fry, M.P., vice-chairman of Council of University College; and Rev. Professor Jowett, master of Balliol College, Oxford. The faculty formed a medical educational board to carry on the work of the school, subject to the control of the governing body.

In an able address Mr. Lewis Fry referred first to the Medical Acts Amendment Bill. His own opinion was that the establishment of a joint examining board was most desirable, and he believed that this was also the general feeling of the profession in England; but in Scotland there was an extremely strong opposition to the measure on the part of the universities, which appeared to fear the loss of much of their prestige and of the substantial benefits resulting from it. He thought it very doubtful if the Bill would become law this session. Passing to the subject of the Bristol Medical School, Mr. Fry gave a sketch of its long and honourable history, and then proceeded to speak more particularly of the important changes that had recently been completed. It was from the faculty of the school that the idea emanated which resulted in the establishment of Bristol University College, with the school as its medical department. At first the council of the college had no share in the management of the school, but, as they had just heard, a governing body had now been secured in which all the interests connected with the medical school had a fair and catholic representation, and the thoroughly efficient condition in which the school had now been placed led him to anticipate for it a future of prosperity and distinction.

In moving a vote of thanks to the chairman (which was seconded by Dr. Swayne, the senior member of the Faculty), Mr. Proctor Baker took occasion to point out the large pecuniary value of the prizes awarded by the school, and by the infirmary and the hospital, which amounted to about £160 per annum.

HEALTH OF LARGE ENGLISH TOWNS
IN THE TWENTIETH WEEK OF 1879.

DURING last week 4775 births and 3174 deaths were registered in twenty of the largest English towns. The births were as many as 405, and the deaths 196 below the average weekly numbers during 1878. The deaths, however, exceeded by 6 those returned in the previous week. The annual rate per 1000, which in the ten preceding weeks had declined from 29·1 to 22·4, was again equal to 22·4 last week. The lowest rates in these towns last week were 15·0 in Portsmouth, 15·8 in Brighton, 16·6 in Nottingham, and 18·3 in Leicester. The rates in the other towns ranged upwards to 25·8 in Oldham, 26·0 in Hull, 26·2 in Manchester, and 26·3 in Newcastle-upon-Tyne. The high rates in Manchester and Newcastle-upon-Tyne were to some extent due to the excess of zymotic fatality. The deaths referred to the seven principal zymotic diseases in the twenty towns further declined last week to 358, the lowest weekly number returned in these towns since the middle of February, 1877; they included 106 from whooping-cough, 85 from scarlet fever, 72 from measles, and 43 from fever, principally enteric. The annual death-rate from these seven diseases averaged 2·5 per 1000 in the twenty towns; it ranged from 1·0 and 1·1 in Brighton and Bradford, to 3·6 and 4·1 in Newcastle-upon-Tyne and Sunderland. Scarlet fever showed the greatest proportional fatality in Nottingham and Sunderland; measles in Norwich and Salford; and enteric fever in Sunderland. Small-pox caused 6, and diphtheria 10 deaths in London; whereas no fatal case of small-pox, and only 7 of diphtheria were returned in the somewhat larger aggregate population of the nineteen provincial towns. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had steadily declined in the eleven preceding weeks from 353 to 204, were 208 on Saturday last; and 48 new cases of small-pox were admitted to these hospitals during last week, against 36 and 33 in the two previous weeks. The Highgate small-pox hospital contained 20 patients on Saturday last.

THE hospital built by the Poplar District Board of Works for the treatment of non-pauper cases of infectious disease has been formally opened. It is situated in the Southern-road, Plaistow.

Correspondence.

"Audi alteram partem."

LITHOTRITY AT ONE SITTING.

To the Editor of THE LANCET.

SIR,—My reply to the long communication of Professor Bigelow may be short, and that for the following reason. When Professor Bigelow was in this country last summer he did me the honour of calling on me—an opportunity which I gladly seized to offer him a hearty welcome, hoping that we might have the opportunity of comparing notes on a subject which is interesting to both of us. I was, moreover, particularly anxious to learn from himself something of his views and practice lately published. I at once, therefore, told him that there were five or six cases of lithotrity under my care within a few yards of my door, and gave him a pressing invitation to assist at the next sittings, at his own time and convenience. He declined, saying that he was travelling solely for his recreation, and that he wished to be free from all professional occupation.

Now, had Professor Bigelow accepted my invitation, it is not possible he could have written as he has done about Clover's aspirator, nor of my method of operating as "mainly the operation of Fergusson," the difference being wide as the poles asunder; and this many of our American brethren who have seen both (which the Professor has not) can readily testify. It is a matter of regret to me that he did not embrace so easy an opportunity of learning what the instrument and the operation are capable of performing before affirming their shortcomings so freely. And to do so would have cost far less time than the writing of an article containing inaccurate statements respecting them, the reply in detail to which would require an equally long or longer letter from myself, a task for which I have neither time nor inclination. I hope to cross the Atlantic some day, and shall be only too glad of the chance, if he will give me one, of becoming a friendly witness of his own proceeding, and of discussing, if he thinks it worth while, all the little claims he mentions about the relative openings &c. of instruments to which he has devoted so much space.

I have, however, to protest, on the part of Mr. Clover, against his aspirator being considered—and this furnishes a specimen of the inaccuracies referred to—"a form of Crampton's instrument." Sir P. Crampton was good enough to send me one many years ago; it was a large glass receptacle, exhausted by a small air-pump every time it was applied to the catheter, and having no resemblance whatever to Clover's elastic bottle. The difference between Crampton and Clover is infinitely greater than the difference between Clover and Bigelow; the elastic bottle of Bigelow being only a stronger one than Clover's, and attached to a larger catheter, with the trap to catch fragments in another place; a difference in degree, not in kind. But all this, and more that is misleading, in the Professor's article (I am sure unintentional, and due to misapprehension), would have been avoided had he been able to give me an hour at the bedside of some patients, and to have discussed these practical points.

I am, Sir, yours, &c.,

May 18th, 1879. HENRY THOMPSON.

SURGEON-MAJOR REYNOLDS.

To the Editor of THE LANCET.

SIR,—The absolute and relative inadequacy of the reward granted to Surgeon-Major Reynolds for his share, professional and combatant, in the defence of Rorke's Drift, is established by the fact that it merely confers upon that officer the same rank as he should have attained, at fourteen months' later date, in the ordinary course of departmental promotion; whereas Majors Chard and Bromhead most probably could not, in the ordinary course of promotion, have attained the army rank which they now hold under at least eight or ten years. But besides this, according to the rule at present observed in the Army Medical Department in similar cases—witness those of Surgeon-Majors B. Hinde, Burland, Gore, and Waters,—the rank of surgeon-major conferred on Mr. Reynolds for distinguished services as a medical officer of less than twelve years' standing, assumes, as regards his precedence over the sixty-four above whom he has been promoted, an evanescent or retrograde character, inasmuch as each of those sixty-four who may complete twenty years' service will be placed before Surgeon-Major Reynolds in a separate list of surgeons-major holding the relative rank of lieutenant-colonel, and will resume his original relative seniority to the man who had been promoted over him. Very different are the conditions of army brevet rank, which is not only permanent, but endowed with a progressive quality, entitling its fortunate possessor to still higher positions. If fourteen months' extra service had been granted to Surgeon-Major Reynolds, he would enjoy a fixity of tenure in his new position similar to that of military officers holding army brevet rank. The crowning distinction of the Victoria Cross having, however, been withheld from him, although so gallantly earned, even if eventually conferred, will have been deprived of much of the gracious favour which ought to pertain to it.

The recognition of Surgeon-Major Reynolds' services by the King and Queen's College of Physicians in Ireland, and by the University of Dublin, in conferring upon him the honorary Fellowship of the former, and the degree of LL.D. of the latter—as mentioned by THE LANCET and one of the military journals—will go far to compensate him, and his brother offices in the Army Medical Department, for the scanty, unwilling, and ungracious recognition of his and their just claims on the part of the military authorities.

Yours &c.,

"THE LABOURER IS WORTHY OF HIS REWARD."

May 20th, 1879.

THE ELECTION TO THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—In consequence of a paragraph in your journal, I shall feel obliged if you will allow me through the same medium to state that it is not my intention to offer myself for re-election on the Council of the College of Surgeons. In taking this step, I feel that, for various reasons, into which it is needless to enter, I shall best promote the interests of the College.

I remain, Sir, your obedient servant,

Harley-street, May 17th, 1879. GEORGE CRITCHETT.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the required examination for the diploma, were duly admitted Members of the College at a meeting of the Court of Examiners on Tuesday last:—

Adolphus, T. F. Pennington, L.S.A., Lyndhurst-road.
Baldwin, F. B. Judge, L.S.A., Warwick.
Baillie, J. H. Johnson, L.R.C.P. Ed., Old Bond-street.
Baillie, Richd. Houghton, L.R.C.P. Ed., Old Bond-street.
Barron, Herbert G., L.R.C.P. Lond., Southport, Lancashire.
Callender, John Hawkes, L.S.A., North Shields.
Chambers, Alfred Edward, Bolton.
Cox, Fredk. Augustus, Dean-street, Park-lane.
Crisp, Thomas, L.S.A., Beaufort-street, Chelsea.
Davies, Morgan, M.B. Aberd., Llangwyryfan, Cardiganshire.
Dearden, Richard Jessup, Douglas, Isle of Man.
Dunn, Walter, L.S.A., Gordon-square.
Dyson, Thomas Sheppard, L.S.A., Sheffield.
Evans, Arthur Llewellyn, Wrexham.
Hine, Harry, Nottingham.
Hoskin, Theophilus, Calstock, Cornwall.
Mantle, Alfred, L.S.A., Stourport, Worcestershire.
Mumby, Bonner Harris, M.B. Aberd., Gosport, Hants.
Noble, James Black, Newcastle-on-Tyne.
Palmer, William Pitt, L.S.A., Ilminster.
Penny, Edward, L.S.A., Blandford.
Poland, John, L.R.C.P. Lond., Blackheath.
Rice, George, L.R.C.P. Ed., Derby.
Spurgin, Thos., L.R.C.P. Ed., Henrietta-st., Cavendish-sq.

The following gentlemen passed on Wednesday last:—

Barnes, John Gay, Swindon, Wilts.
Blair, Archibald, Peterborough.
Creagh, Stephen Henry, Stoke Devonport.
Curd, Charles, L.S.A., Coombe Down, Somerset.
Embleton, Dennis Cawood, Newcastle-on-Tyne.
Fooks, George Ernest, Harrow, Middlesex.
Rhodes, James H. E., Bury St. Edmunds.

Knapp, E. M. Molineaux, Clifton, Bristol.
Madge, T. H. Tuscey, Paignton, Devon.
Parry, Robert, L.S.A., Festiniog.
Shelly, Charles Edward, B.A. Cantab., Leamington.
Smith, Frank, Maida-vale.
Taylor, W. C. Beerley, Scarborough.
Thorpe, Henry Stanley, L.S.A., Hertford.
Wilde, Frederick, Southampton.
Wilson, Frederick, Worsley.

For the Primary Fellowship Examination, which commenced on the 23rd inst., there are upwards of sixty candidates.

The following gentlemen passed the Primary Examination in Anatomy and Physiology at a meeting of the Board of Examiners on the 15th inst.:—

Chas. R. Bamford and James S. Tew, University College; Ernest Berkett, Horace Hobden, Chas. F. Bailey, William J. Nichols, and Herbert H. Myers, St. Bartholomew's Hospital; George H. Capes, George I. Currah, Alfred J. Hind, Michael O'Kane, and Walter E. Rudd, Guy's Hospital; John S. F. Clark, Walter A. B. Potts, and Arthur de Prenderville, St. Mary's Hospital.

Of the 117 candidates examined at the recent meetings of the Board, 34 failed to reach the required standard, and were referred for three, and 12 candidates for six, months' further anatomical and physiological study.

Mr. B. Thompson Lowne, F.R.C.S., will commence his course of three lectures on the Physiology of Sensation, in continuation of last year's lectures, in the theatre of the Royal College of Surgeons, on Wednesday, the 4th proximo; and will be succeeded by Professor Jonathan Hutchinson on the 11th, who will deliver six lectures on the Influence of the Nervous System in the Production of Disease, chiefly with reference to the skin, eye, and joints. These lectures, which will be delivered on Mondays, Wednesdays, and Fridays, at four o'clock, will be brought to a close on the 23rd of June.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on May 15th:—

Campbell, Robert Huntley, Trumpington, Cambridge.
Corke, Cecil Aloysius, Pontesbury, Salop.
Newsholme, Arthur, Vincent-square, Westminster.
Palmer, William Pitt, Ashill, Ilminster.
Wainwright, A. Stenton Rathbone, Ixworth, Bury St. Edmunds.
Watson, Frank Spence, Southampton-row.

The following gentlemen on the same day passed the Primary Professional Examination:—

Thos. B. F. Eminson, St. Mary's Hospital; James Parette, Charing-cross Hospital; William J. Pook, London Hospital.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At examinations held on the 2nd and 3rd inst. the following gentlemen obtained the Fellowship of the College:—

Baxter, Patrick Charles. | Mason, Samuel Robert.
Purefoy, Richard D.

THE Kenilworth Local Board and Urban Sanitary Authority have resolved to apply to the Local Government Board to sanction their obtaining a loan of £6000 for sewerage works, &c.

THE deaths registered in London last week numbered 1532, representing an annual rate of 22·1 per 1000. The most fatal disease of the zymotic class was whooping-cough, to which 59 deaths were referred; measles accounted for 53, scarlet fever for 24, diphtheria for 10. Bronchitis was fatal in 208 cases, and pneumonia in 165.

NORFOLK AND NORWICH HOSPITAL.—The Prince of Wales has consented to lay the first stone of new buildings about to be erected in connexion with the Norfolk and Norwich Hospital. Tuesday, June 17th, is the day fixed for the ceremony.

HOSPITAL FOR SICK CHILDREN.—Lord Aberdare has consented to become chairman of the Committee of Management of the Great Ormond-street Hospital for Sick Children, as successor to Mr. Walter, M.P., who has relinquished the office in consequence of the pressure of other duties.

BEQUESTS, ETC., TO MEDICAL CHARITIES.—The Walsall Cottage Hospital has become entitled to £300, under the will of Miss Sharratt, of Bath. The Sussex County Hospital, Brighton, has received £100, under the will of Mrs. John Gale. A lady has given £500 to the Clinical Hospital and Dispensary for Children, Cheetham, Manchester. The Leicester Infirmary has received £1000 under the will of Mr. Joshua Biddle, of Claydon. The Arbroath Infirmary has become entitled to £300 under the will of Mr. Robert Miln, of Viewfield.

Medical Appointments.

ALLARD, W., F.R.C.S.E., has been reappointed Medical Officer of Health for the Tewkesbury Urban Sanitary District, at £50 for one year.

BARR, J., M.B., L.R.C.S.Ed., has been appointed Resident Assistant Medical Officer to the Bolton Union Workhouse at Fishpool, vice Segrave, resigned.

BERRY, J., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Leyland Urban Sanitary District, Lancashire, at £15 for one year.

BUNN, C. G., L.S.A.L., has been appointed Assistant Medical Officer to the Charing-cross Hospital, vice Murray, appointed Assistant Surgical Officer.

CARLETON, J. S., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the No. 2 District of the Westbury-on-Severn Union, vice Collins, resigned.

CLARKE, A., L.R.C.P.L., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Gildersome District of the Bramley Union, Yorkshire.

CLOTHIER, H., M.D., L.R.C.P.L., has been appointed Medical Officer of Health for the Hornsey Urban Sanitary District, at £100 per annum, vice Oakeshott, deceased.

DAVIES, D., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Stapleton Urban Sanitary District, Gloucestershire, at £25 per annum.

DAY, E. J., M.R.C.S.E., L.S.A.L., has been appointed Public Analyst for the Borough of Dorchester, at 10s. 6d. per analysis, for one year.

EDWARDS, F., L.R.C.P.Ed. & L.M., L.F.P.S.G., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the No. 4 District of the Saffron Walden Union, vice Forsayeth, resigned.

EVANS, J. T., jun., M.D., C.M., L.R.C.P.I., has been appointed a Medical Officer to the General Infirmary, Hertford, vice Elin, resigned.

HARRISON, E. M., L.S.A.L., has been appointed Resident Medical Officer to the Charing-cross Hospital, vice Rowbotham, whose term of office has expired.

HAVILAND, A., M.R.C.S.E., has been reappointed Medical Officer of Health for the Newport-Pagnell Rural Sanitary District, Bucks, at £105 per annum, for three years.

HILL, A. B., M.D., L.R.C.P.Ed., has been appointed Public Analyst for the Borough of Royal Leamington Spa, at £20 per annum and 6s. 6d. per analysis, vice Thompson, resigned.

HILLS, R., M.R.C.S.E., L.F.P.S.G., has been appointed Certifying Factory Surgeon for Coulsborough, Yorkshire.

JONES, LL. R., M.B., C.M., has been appointed Assistant Medical Officer at the North Wales Counties Lunatic Asylum, Denbigh, vice Miles, resigned.

JONES, W. F., M.R.C.S., L.R.C.P. & L.M., L.A.H.D., has been appointed House-Surgeon to the Denbighshire Infirmary, Denbigh, vice Pritchard, resigned.

MILLIGAN, W., L.R.C.P.Ed., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Wirksworth Urban Sanitary District, Derbyshire, at £15 for one year.

MOORHEAD, R. L., M.D., L.R.C.S.Ed., L.S.A.L., has been appointed Assistant Resident Surgeon to the Nottingham Dispensary, vice Pickford, resigned.

MOYNIHAN, J. F., L.R.C.P.Ed., L.R.C.S.Ed., L.A.H.D., has been appointed Medical Officer, Public Vaccinator, &c., for the Whitechurch Dispensary District of the Cork Union, at £120 per annum and fees, and £15 per annum as Medical Officer of Health, vice T. Moynihan, L.R.C.P.Ed., L.R.C.S.Ed., resigned.

MURRAY, Mr. H., has been appointed Assistant Surgical Officer to the Charing-cross Hospital, vice James, whose term of office has expired.

NICOLLS, A., M.R.C.S.E., has been appointed Medical Officer, Public Vaccinator, &c., for the Drumlish Dispensary District of the Longford Union, at £100 per annum and fees, and £20 per annum as Medical Officer of Health, vice Wilson, deceased.

OLIVER, W., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Newcastle Waterworks, vice Thompson, resigned.

PALMER, Mr. J., has been appointed Resident Physician's Assistant to the Middlesex Hospital, vice Webster, whose appointment has expired.

PATTISON, E. S., M.R.C.S.E., has been appointed Resident Surgical Officer to the Charing-cross Hospital, vice Wickers, whose term of office has expired.

PAYNE, G. S., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Farcet District of the Peterborough Union, vice Thomson, resigned.

SCORESBY-JACKSON, T., M.D., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Claines District of the Droitwich Union, vice Willan, deceased.

SELLS, C. J., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer to Abbotts Hospital, Guildford, vice T. J. Sells, M.R.C.S.E., deceased.

SHEA, J., M.D., has been appointed a Physician to the Royal Berkshire Hospital, Reading, vice Woodhouse, deceased.

SPARROW, T. F., M.D., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer, Public Vaccinator, &c., for the Kilskeer Dispensary District of the Kells Union, co. Meath, at £120 per annum and fees, and £15 per annum as Medical Officer of Health, vice MacDermott, resigned.

STEPHENS, E., L.R.C.P.Ed., M.R.C.S.E., has been reappointed Medical Officer of Health for the Chard Rural Sanitary District, at £50 for one year.

TURTON, J., L.S.A.L., has been appointed Resident Obstetrical Officer to the Charing-cross Hospital, vice Curde, whose term of office has expired.

WALLACE, J., M.D., L.R.C.S.Ed., has been appointed Medical Superintendent of the Parish of Greenock new Lunatic Asylum at Smithstone.

WARD, M. A., M.B., F.R.C.S.I., has been appointed a Surgeon to Mercer's Hospital, Dublin, vice Ledwich, deceased.

Births, Marriages, and Deaths.

BIRTHS.

FINLAY.—On the 14th inst., at Montagu-street, Portman-square, the wife of David W. Finlay, M.D., of a son.

GLAISTER.—On the 18th inst., at Grafton-square, Glasgow, the wife of John Glaister, L.R.C.P.Ed., of a daughter.

HALL.—On the 15th inst., at Laurel Villa, Victoria-road, Surbiton, the wife of Edgar Atheling Hall, M.B., of a son.

LLOYD.—On the 14th inst., at the Lambeth Union Infirmary, Brooke-street, the wife of Robert Hodgens Lloyd, M.D., the Medical Superintendent, of a son.

OWEN.—On the 17th inst., at 18, Old Ford-road, the wife of William Owen, M.R.C.S.E., of a daughter.

PITTOCK.—On the 11th inst., at Cecil-square, Margate, the wife of George M. Pittock, M.B., of a son.

STOCKS.—On the 17th inst., at Wandsworth-road, the wife of Frederick Stocks, M.R.C.S.E., of a daughter.

MARRIAGES.

BERRY—FOREMAN.—On the 15th inst., at St. Joseph's Catholic Church, Wigan, by the Rev. Father Lamon, assisted by the Rev. Father Monaghan, the Rev. Father Grennan, and the Rev. Father Dorram, M.C., Wm. Berry, M.R.C.S.E. & L.R.C.P. & S. Ed., to E. Ellen Foreman, daughter of the late Wm. Foreman, Esq., M.D., of Standishgate, Wigan.

CLARKE—ELLIS.—On the 15th ult., at the English Church, Graaff Reinet, South Africa, by the Rev. Canon Steabler, Thomas Furze Clarke, M.R.C.S.E. &c., of Somerset East, South Africa, eldest son of Thomas Meadows Clarke, of Richmond, Surrey, to Fanny Maria, eldest daughter of William Henry Ellis, of Stratford, Essex.

DEATHS.

MIDDLETON.—On the 22nd ult., at Cawnpore, Bengal, of typhoid fever, Catherine Margaret, wife of Surgeon-Major J. Middleton, M.D., A.M.D., and daughter of Capt. Hogg, late 56th Regiment.

NICOLL.—On the 14th inst., at the Charterhouse, Charles Richard Nicoll, M.D., the Resident Medical Officer, aged 64.

PINNOCK.—On the 19th inst., at Marsden, William John Pinnock, Surgeon, aged 39.

ROWLANDS.—On the 18th February, at Lismore, New South Wales, Daniel George Rowlands, M.R.C.S.E., aged 34.

SECKER.—On the 20th inst., at Hull, Samuel Secker, M.R.C.S.E., aged 65.

SUTTON.—On the 16th ult., at The Hollies, Holmes Chapel, Cheshire, Edith, the beloved child of Charles Frederick and Maria Eliz. Sutton, aged 7 years.

TAYLOR.—On the 18th inst., at Gayton-terrace, Hampstead, Sir Alexander Taylor, K.B., M.D., of Pau, France.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

Notes, Short Comments, and Answers to Correspondents.

THE BRUSSELS M.D.

Subscriber.—1. The degree in question does not entitle the owner to practise either in Brussels or in Britain.—2. It is impossible to say whether, under new legislation, it is likely to be recognised.—3. There is no impropriety in using it as a title. The degree in question is given, after examination, to persons possessed of medical and surgical qualifications. The examination consists of three parts. It is said to be almost on a level with that of the L.R.C.P. Lond., and is certainly more difficult than that of "the Hall." It is *viva voce*, very practical in character, and conducted through an interpreter. The clinical part of the examination is, we believe, good. A few years ago the authorities became rather lax, but have lately considerably raised the standard of the examination. The question of the registration of foreign degrees is one that will have to be very gravely considered by the British Universities as well as the General Medical Council. It would clearly be unjust to make the foreign ways into the profession easy, though some recognition of foreign qualifications will be provided for under any new Act.

W. R. M. C. A.—The usual scale is 10s. 6d. for each statute adult, or 12s. if the surgeon provides drugs and instruments. The number of emigrants carried varies considerably; but the surgeon will probably receive from £80 to £150, and something wherewith to pay his homeward passage if he desires to return.

F. B.—All that is known of this matter will be found in the standard works in the hands of the profession.

Dr. James M'Munn's paper will be inserted in an early number.

PROTECTION OF QUACKS BY REGULAR PRACTITIONERS.

X. Y. Z. complains, very justly, that an unqualified person occupies in his neighbourhood a house on which figures the name of a surgeon who lives miles away. Deaths happen, and certificates are given in the name of this surgeon, though the cases have been seen only by the unqualified person, who represents himself as a doctor. The best advice we can give to our correspondent is to get the facts of such a case as he represents well together in which what is practically a false and misleading certificate of death is given, and bring them under the notice of the surgeon in question. If he admits them, and does not express an intention of abandoning such culpable conduct, it would be then the duty of our correspondent, or, better still, of the whole of the practitioners of the neighbourhood, to bring the facts to the notice of the Registrar-General, the Medical Council, and such bodies as have granted qualifications to the said surgeon. It is surely a case for the exercise of the ethical and judicial functions of the Corporations, of which we hear so much and see so little.

R. C. B.—Both the University of Durham and that of St. Andrews give degrees, without residence, to practitioners.

Mr. J. J. Berry.—The information came to us in the usual manner.

CURABILITY OF INSANITY.

To the Editor of THE LANCET.

SIR,—Among the latest of many uncomplimentary and unjust remarks made in THE LANCET on the medical treatment of the insane in asylums, I notice with surprise the following in your last number: "It is to be deplored that the section of the profession engaged in lunacy practice has not yet arrived at the conclusion that insanity is curable," &c. I should like to know who *has* arrived at such a general conclusion? A great deal of insanity is curable and cured—about one-third of the annual admissions into the public asylums,—but the remarks I quote seem to imply that those not engaged in lunacy practice have some superior knowledge on the subject. The incurability of some insanity is no more a reproach to the doctors who treat it than is the incurability of cancer, phthisis, or scores of other complaints, and for my part I resent such an unfounded sneer at the supposed ignorance or incapacity of "those engaged in lunacy practice." A little observation would soon show that in all asylums insanity is "treated as a disease," and that we "strive to cure it," and a little more inquiry would show that many cases are due to hereditary influences and innate conditions which no treatment can cure. A reference to the literature of the last twenty years, too, would show quite as much activity in their own sphere on the part of those engaged in lunacy practice as of those engaged in criticising them so freely and with such little justice.

I am, Sir, yours &c.,

Cambs County Asylum, May, 1879. G. M. BACON, M.D.

*** Nevertheless, it is the fact that the curability of mental disease is not generally recognised, or that the hope of cure possesses and inspires the minds of asylum-keepers generally. That there are some enterprising practitioners who entertain the belief that insanity is a disease, we do not doubt; but lunacy practice is for the most part based on the presumption that safe custody for an indefinite period is the primary aim of asylums, with, *incidentally*, so much attention to the general health as may conduce to recovery. The notion of *curing* insanity as a disease is not general, and active measures adopted for its treatment, such as the "cold-pack," counter-irritation, &c., are commonly regarded with suspicion by medical superintendents and the Commissioners alike.—ED. L.

AN ARDUOUS POST.

THE Shoreditch Board of Guardians have decided to appoint an assistant resident medical officer in the infirmary of this district, as the medical officer had been called up during the last year no less than 306 times! The infirmary now contains 472 patients, and there were more than 500 a short time ago. It is suggested that the salary, with board &c., shall be £100 per annum.

A. J. L.—That of the Silicated Carbon Filter Company, Battersea Works.

An Inquirer.—Strengthen the moral character, which should control both impulse and conduct.

Dentist.—We are unable to give the information required.

JUVENILE INCONTINENCE OF URINE.

To the Editor of THE LANCET.

SIR,—May I inquire, through the medium of your columns, of the gentlemen from whom a short time ago some remarks on this subject appeared in THE LANCET, whether they withheld solid meat from the dietary on the ground of its producing irritation and thus bladder contraction, or whether they considered that it was the nitrogenous element of the meat which was the cause of the incontinence, rendering it in their experience necessary to withhold altogether animal broths and soups, and whether fish might be taken as an article of diet in those under treatment for the affection? Yours faithfully,

May 13th, 1879. INQUIRER, M.D.

PRESENTATION TO REV. S. HAUGHTON, M.D., F.R.S.

AN address, accompanied by a silver salver, was on the 15th inst. presented to this gentleman by the medical staff of the School of Physic, Trinity College, Dublin, on his resignation as Registrar of the school. Dr. Hudson read the address, which referred to the advantages the school had derived from Dr. Haughton's long connexion with it, and to his exertions in obtaining the present anatomical rooms, museums, and chemical laboratories. The salver bears the following inscription:—"To the Revd. Samuel Haughton, M.D., F.T.C.D., D.C.L., F.R.S., from the Professors, Lecturers, and Demonstrators of the School of Physic in Ireland, in testimony of his services as Medical Registrar. May, 1879."

Mr. Gordon Jones.—Under the Duke of Richmond's Bill, students entering in October would be examined under a Conjoint Board. There is a saving clause in the Bill, but it is in favour of persons who have obtained qualifications before the commencement of the Joint Board system.

An Edinburgh Man has not authenticated his statement.

OPIUM-POISONING; RECOVERY.

To the Editor of THE LANCET.

SIR,—On Tuesday, July 23rd, 1878, at 12.30 P.M., I was called to visit Mr. S——, residing at Stevenson-street, San Francisco. His wife explained to me on the way to his house that her husband was suddenly taken sick; in fact, she and her friends believed it to be a fit of apoplexy. She then went on to say that directly after partaking of his supper he fell back in the bed senseless &c. On my arrival I found him as described. I made a superficial examination. The pulse small, quick, and feeble; the body bathed in a cold, clammy perspiration; flabby, death-like extremities; heart's action irregular. Upon raising the eyelids, I found the pupils contracted. I at once suspected narcotic poisoning, and endeavoured to arouse him. After showing slight indications of consciousness, he relapsed, and became just as bad as before. Upon making further inquiries of the friends and acquaintances, they assured me that three of the persons present had been in his company since nine o'clock the same evening, and that it was a matter of impossibility for him to have taken anything injurious without their knowledge, and said that all he had taken during the evening was two glasses of beer with a supper of ham and eggs. Whatever the cause might have been, it was quite evident that no time was to be lost in doing something to bring the patient out of this state. To treat symptoms appeared to be the most rational course to pursue. I commenced with administering an emetic of salt-and-water, mustard not being within reach at the time. Afterwards I applied flannels wrung out in very hot water, to which mustard was added (in the form of stupes), to the nape of the neck, the whole length of the spine, over the heart, to the calves of the legs, soles of the feet, and palms of the hands. After two or more applications, the heart's action improved, the pulse become fuller, and, in fact, the patient was progressing favourably. I left for the purpose of obtaining medicines to act on the bowels, but was detained. On my return I was informed that he had vomited freely, and that the vomit had been thrown out, much to my annoyance, thereby rendering it impossible to discover what the stomach contained. I left and returned home.

I visited the patient at 9 A.M. on the 24th, and found him much improved; in fact, he was quite rational, although tremulous and feeble. His first question to me was, "Doctor, I hear that you attended me last evening. What did you treat me for? and what did you think was the matter with me?" I said I believed that he had taken something into his stomach which he ought not to have done. Perhaps, continued I, laudanum, morphia, or some such drug. He said, "Doctor, you are right. I drank one ounce of laudanum at nine o'clock in the evening." I inquired whether he vomited afterwards or felt sick. He replied, "No." I then questioned him again as to the correctness of the time. He repeated that it was 9 P.M. the evening previous. I ordered strong coffee, beef-tea, &c. By this time the regular family physician, Dr. Belinge, arrived, when we promised not to make known this suicidal intent to the young wife.

I saw him again the following day. He was doing well, and soon recovered.

The most peculiar features of this case appear to be—first, the time elapsing (four hours) after the poison had been taken before the attack came on; secondly, the suddenness of the so-called fit, which in some degree may be likened to apoplexy.

I remain, Sir, yours truly,

San Francisco, March, 1879. W. R. G. SAMUELS, M.D., &c.

MR. JOHN LAMBERT, K.C.B.

THE permanent Secretary of the Local Government Board, Mr. John Lambert, C.B., has had conferred upon him this week the honour of K.C.B. Let us hope that this is an earnest of the Public Health, as well as Poor-law, Department of the Government receiving greater justice from the hands of Her Majesty's advisers than it has yet hitherto had.

A. B.—Those holding one qualification and registered, or holding appointments on the strength of this, will doubtless be considered in any new legislation.

Larynx.—The paper is marked for insertion.

THE TITLES OF M.B. AND C.M.

M.B. and C.M. wishes to know if the graduates of Universities holding such degrees as his are entitled to the appellation of "doctor." Certainly not. But he wishes to know in that case what is to distinguish them from the mere licentiate or possessor of a diploma. Surely the answer is obvious. The letters M.B. and C.M. after the name. A name may have distinguishing titles after it as well as before it. A F.R.S. or a K.C.B. is not less distinguished because the honours follow a name. No critic is misled by the vulgar use of the title "Dr." where it does not represent the degree of M.D., and Bachelors of Medicine should give no countenance to such vulgarity.

SHAKESPEARE AND THE CIRCULATION OF THE BLOOD.

To the Editor of THE LANCET.

SIR,—Commenting on the speech of our gifted Premier the other night at the Royal Academy, in which he hints to our artists to study Shakespeare more fully in search of *subjects* for their pencils, I wonder, with all due respect to the memory of Harvey, whether that illustrious physician had studied Shakespeare deeply; for in Act III., Scene II., of the "Second Part of Henry VI.," *Lord Warwick*, on beholding the body of Duke Humphrey, of Glos'ter, displays a most marvellous knowledge of the heart's action:—

"See, how the blood is settled in his face!
Oft have I seen a timely-parted ghost,
Of ashy semblance, meagre, pale, and bloodless,
Being all descended to the labouring heart;
Who, in the conflict that it holds with death,
Attracts the same for aidance 'gainst the enemy;
Which with the heart there cools, and ne'er returneth
To blush and beautify the cheek again.
But see his face is black and full of blood."
(&c. &c.)

"I cannot but stop a moment to observe," says Dr. Johnson, "that this terrible description is scarcely the work of any pen but Shakespeare's."

William Harvey was born, I think, at Folkestone in 1578, published his work on the "Circulation of the Blood" in 1628, and was head physician to Charles the First in 1632.

William Shakespeare was born at Stratford-on-Avon, Warwickshire, in 1564, and died in 1616.

I find also in vol. i. of Grey's "Notes on Shakespeare," p. 288, a few lines from Echard's "History of England," vol. i., p. 89:—

"If this same were a churchyard where we stand,
And thou possessed with a thousand wrongs;
Or if that surly spirit, melancholy,
Had baked thy blood, and made it heavy, thick,
Which else runs tickling[1] up and down thy veins."

Grey says Shakespeare wrote this some time before the discovery of the circulation of the blood by the celebrated Dr. Harvey, which was about the year 1628. Had he lived till that time, he would have expressed his meaning with more propriety.

These passages I extract from old copies of Shakespeare and Zachary Grey, marked by my father-in-law, the late Charles Kean.

Yours faithfully,

COSMO LOGIE, M.D.,

Junior United Service Club, May, 1879. Late R.H. Guards.

Mr. O. E. B. Marsh.—Most of the prison appointments are in the gift of the Home Secretary—e.g., the medical officership of Brixton Prison is now vacant by the death of Dr. J. D. Rendle, and is worth £350 a year. There are also some few appointments on the staff of the Medical Department of the Local Government Board, presumably in the gift of the President, and commencing at £500 a year.

MEDICAL MEN AND THE CLERGY.

To the Editor of THE LANCET.

SIR,—I have had extensive experience in general practice in both England and Scotland, and may state that I have never known a medical man of any standing send in a bill to, or accept a fee from, a clergyman. This is, I think, among medical practitioners in first-rate practice a long-established and universally acknowledged custom.

As I know nothing of practice in Ireland, I offer no comment on the somewhat avaricious-spirited letter of "Lancaster Joyce."

In regard to the letter of "S.," I may say that I have never been unfortunate enough to be acquainted with any medical man who would demean himself by entering into an arrangement with any clergyman to "tout" for him.

The country clergy both in England and Scotland are, as a rule, miserably underpaid, and there are many clergymen with large families who find it very difficult to make ends meet, and at the same time live in a way as becomes their social position in life. It is surely not a very great act of charity to give advice to such *gratis*. At the same time, of course, it should be distinctly understood that no clergyman can claim gratuitous medical attendance and advice as a right.

Yours faithfully,

May, 1879. M.B.

[1] Query, trickling.

REMARKABLE PHENOMENON.

A REMARKABLE occurrence with reference to the photographing of a church weathercock at Tenby is reported. At the time nothing was observed by the artist but the object upon which he was engaged; but on the development of the plate, the outline of a boat, with colours flying fore and aft, was distinctly visible about two-thirds up the spire—in a reverse position. The photograph was taken at a quarter-past six, and about that time the gunboats were launched at Pembroke Dock. It is thought that it is a mirage of one of the gunboats soon after launching.

O. W.—The paper is marked for insertion.

"ONLY A DOCTOR."

To the Editor of THE LANCET.

SIR,—I have read your annotation on the above subject in your issue of May 10th, in which you justly comment on the gallantry of Surgeon Reynolds at Rorke's Drift, and the insufficient recognition of it by the authorities.

In civil practice we also occasionally meet with the queer idea, "only a doctor," when there are circumstances passed through involving great risk to life by the medical practitioner.

In the outskirts of this town, to the south-west, is a row of houses. After being in attendance at a case in the south-eastern outskirts until about two in the morning on a very wet night, I was called to a house in the south-western row, and had to trudge (there being no cabs or omnibuses) across a good distance to it. I found some neighbours flitting about in excitement, and the inmates of the house itself in still more; in fact, in a terror or terrible ferment. I heard glass being smashed in the back room, and the furious exclamations of an insane man. I found also three people holding on to a rope attached to the handle of the door leading into this room, and was told by them on my touching the handle not to go in on any account, as I should be killed. Notwithstanding this, however, I, after a moment's thought (for I did not know but what there were firearms in the possession of the gentleman, who had travelled in the regions of America, where "stand and deliver" was the order of the day), went in, and had to parry the blow of a crutch aimed at my head; for, luckily for me, our patient had had one thigh amputated pretty high up. I succeeded in mastering him, and after a little time got him in the mood of hearing a little reason, while a rattle was set going by a kind lady friend—for as I learned afterwards, my defence,—and he allowed himself to be put under the charge of a policeman for the remainder of the night. An amusing incident happened on my leaving the house; for I was saluted by a loud voice from the door of a neighbouring house, and the exclamation, "He ought to have a proper keeper." I inquired from whom the voice came, and was told a clergyman, on which I reminded him he belonged to one profession and I to another, and told him I would not interfere with him, and that I might fairly expect he would not interfere with me; at the same time reminding him I had run a risk of my life.

The next day, on talking with the lady relatives about the various incidents connected with the case, I mentioned the risk run in going into the room, which seemed to them to apply to everyone else except the doctor; for they exclaimed, "Oh, yes, but you're a doctor," as if, being that, brought immunity from the transit of a pistol-bullet or from the blow of a crutch on your cranium, or as if the unfortunate doctor were born for the purpose of running such risks for the protection of the higher public who deigned to make use of him for that purpose. The risk, in fact, was minimised when it came down to the poor medico to an infinitesimal dose. I may add that I met our clerical friend a day or two afterwards at dinner at a friend's house, and found him then and subsequently a very nice fellow.

I remain, Sir, yours truly,

Reading, May, 1879. READINGENSIS.

J. J. should apply to the secretary of some hospital to ascertain the requirements.

Dr. Allan Jamieson.—Soon.

"A SELF-SUPPORTING DISPENSARY."

To the Editor of THE LANCET.

SIR,—The very friendly tone of your notice of the Rugeley Provident Dispensary in THE LANCET of May 3rd, and your manifested interest in the good working and success of such institutes, convince me that it will afford you pleasure to learn, and to be able to inform your readers, that even the obstetric department of the Rugeley Dispensary is worthy of commendation, and not of blame. The balance-sheet from which you have drawn your just inferences has deceived you. The 5*s.* per case of midwifery there recorded is an *additional* fee, paid hitherto from the honorary fund, over and above the 16*s.* paid by the member when she retains the services of one of the medical officers two months before her confinement. Our fee is in no case less than one guinea. It is cause for additional gratification that even this extra 5*s.* now comes from the pockets of the benefit members, the special contribution of 1*s.* per family per year sufficing to meet this charge as well as that of management.

Yours faithfully,

Rugeley, May 8th, 1879. D. HENRY MONCKTON.

*** We are happy to be so satisfactorily answered by our correspondent, whose exertions have had much to do in the creation of a self-supporting dispensary.—ED. L.

NURSES FOR THE SICK POOR, BELFAST.

THE annual meeting of this estimable Society was held last week, and from the report we learn that five nurses were employed, and that upwards of 600 patients were attended during the year. Besides the nurses, there are twenty ladies who visit the sick poor under their care. Although there was a balance of £286 to the credit of the Society, yet its working was hampered considerably by want of funds, eight or ten nurses, one for each district, being required. The Society is non-sectarian, and not only supplies nurses for the sick poor and occasionally other aid, but also inculcates lessons of cleanliness, thus improving the sanitary and domestic arrangements of the homes of the poor.

Ne Sus Minerva.—We have already expressed our opinion of the mode of practice praised by our correspondent. It is, in our opinion, undignified and unjustifiable.

Dr. Rose.—We have no paper of the kind on hand.

NITRITE OF AMYL IN SEA-SICKNESS.

To the Editor of THE LANCET.

SIR,—Those of your readers interested in the subjects of nitrite of amyl and sea-sickness will find several articles on them worth their attention in the second volume of THE LANCET for 1875; the drug being specially mentioned in the numbers for August 14th and 21st, and the ailment in August 21st, October 16th, 23rd, and 30th.

Sea-sickness, it will be seen, is variously referred to an *undue congestion of the spinal cord* by Dr. Crochley Clapham; to "a sudden falling of the abdominal viscera, and their want of due support by the muscular parietes during the act of falling," by Dr. Wilks; to the opinion of a leader writer, that the *vertical movement of the body is the chief instrument in its production.*

Treatment, of course, differs. The horizontal posture, chloral, humming a tune, and nitrite of amyl are respectively brought forward. Dr. Clapham's letter of August 21st is most valuable as giving a remedy which had proved most successful in his hands. After mentioning a sea experience of about two years, and the trials of various nostrums for sea-sickness, he gives the result of 124 cases where he had prescribed nitrite of amyl; "121 proved eminently satisfactory, there being no return of the vomiting after the administration of the nitrite, the remaining three being only unsatisfactory in so far as they required a further dose or two of the remedy." He allowed his patients to be sick once, partly for the purpose of having a *bond-fide* case before using the medicine, which was inhaled from three drops on a handkerchief, and advises it to be taken in bed, and repeated in twenty-four hours' time should the sickness return.

Hoping that the wish that the nitrite of amyl may prove as signally fortunate with others, or that its true value may be found out, will excuse my intruding so much on your valuable space,

I am, Sir, yours truly,

ALFD. PAIN, M.R.C.S., L.R.C.P.

Walworth-road, S.E., May 13th, 1879.

The Clerk to the Board of Works for the Lewisham District.—There are several works published on Cottage Hospitals by Messrs. Churchill H. K. Lewis, and others; but none of these deal particularly with hospitals for infectious diseases. With respect to the latter class of hospitals, information should be sought from the Local Government Board, who will have knowledge of the greater number of these hospitals which have been erected in the kingdom, as well, probably, as of all hospitals built under the Sanitary Act, 1866, and of the corresponding provisions as to hospitals under the Public Health Act, 1875. We have reason to know that the Local Government Board possesses a considerable amount of information on the subject which concerns our correspondent, and we recently announced that that department of the Government was at present engaged in an inquiry on the hospital accommodation for sanitary purposes existing throughout England and Wales.

Dr. Purcell.—In an early number.

TRICYCLES.

To the Editor of THE LANCET.

SIR,—I shall be much obliged if any of your readers will give me their experience in the use of tricycles, the distance they can travel with them in a day comfortably and without fatigue, and whether adapted for country practice, where the roads are not so smooth as turnpikes. I shall also be obliged for any hints as to the best kind; whether two large wheels, as in Messrs. Starling's "Salvo," or one large and two smaller, is the easier to work.

Your obedient servant,

May, 1879. VIATOR.

Mr. Carlisle.—1. The late Sir Astley Cooper, Bart., was buried in Guy's Hospital Chapel.—2. The following are all we can find:—Hunterian, by Home and Baillie, for oration and festival, £1684 4*s.* 4*d.*; Mr. Jackson for a prize, £401 1*s.* 4*d.*; Sir C. Blicke for purchase of books, £300; Sir G. Blane for naval medals, £286 15*s.* 1*d.*; Gale's annuity for lectures, £639 16*s.* 5*d.*; and the last, Mr. Erasmus Wilson, £5000. These various sums produce annually £249 2*s.* 6*d.*

Mr. J. B. Dalzell.—Yes, if short.

Medicus.—About 12*s.* a week, besides rent and wages.